

City of Louisville Open Space BioBlitz Summary Report

October 2025



CNHP's mission is to advance the conservation of Colorado's native species and ecosystems through science, planning, and education for the benefit of current and future generations.

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**WARNER COLLEGE OF
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COLORADO STATE UNIVERSITY

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Executive Summary

This report documents the Colorado Natural Heritage Program's (CNHP) 2025 surveys of the City of Louisville Open Space (**Map 1**). Sampling was taken during the Louisville BioBlitz, conducted June 9–13, 2025. The BioBlitz was a collaborative biodiversity assessment effort between CNHP and the City of Louisville to document species occurrences across multiple open space properties. Field surveys were conducted over three days, ending with a public open house on June 13th to showcase findings.

Surveys were led by six CNHP staff experts: Dr. Jennifer Ackerfield (Botanist and Professor at CSU), Tristan Kubik (Entomologist), Brenda Wichmann (Ecologist), John Sovell (Zoologist), Hanna Mohr (Wetland Ecologist), and Luke Knaggs (Wetland Ecologist). Media and outreach was led by CNHP's Julie Kallenberger (Outreach and Communications Specialist) and the City of Louisville Parks, Recreation, and Open Space's Ginger Cross (Senior Marketing Specialist). Event Coordination was led by Jessica Cheadle (Program and Volunteer Coordinator) and the City of Louisville Parks, Recreation, and Open Space/ Open Space Division's Nathaniel Goeckner (Natural Resource Supervisor). CNHP scientists were supported by community volunteers and members of the 2025 Siegle Conservation Science Internship cohort, CSU students participating in CNHP's summer field training program. Additional surveyors volunteered their time to survey for one day of the bioblitz, including My-Lan Le (Botanist, Denver Botanic Gardens), Barbara Thiers (Bryology), Mo Ewing (Bryology), and Ed Lubow (Mycology).

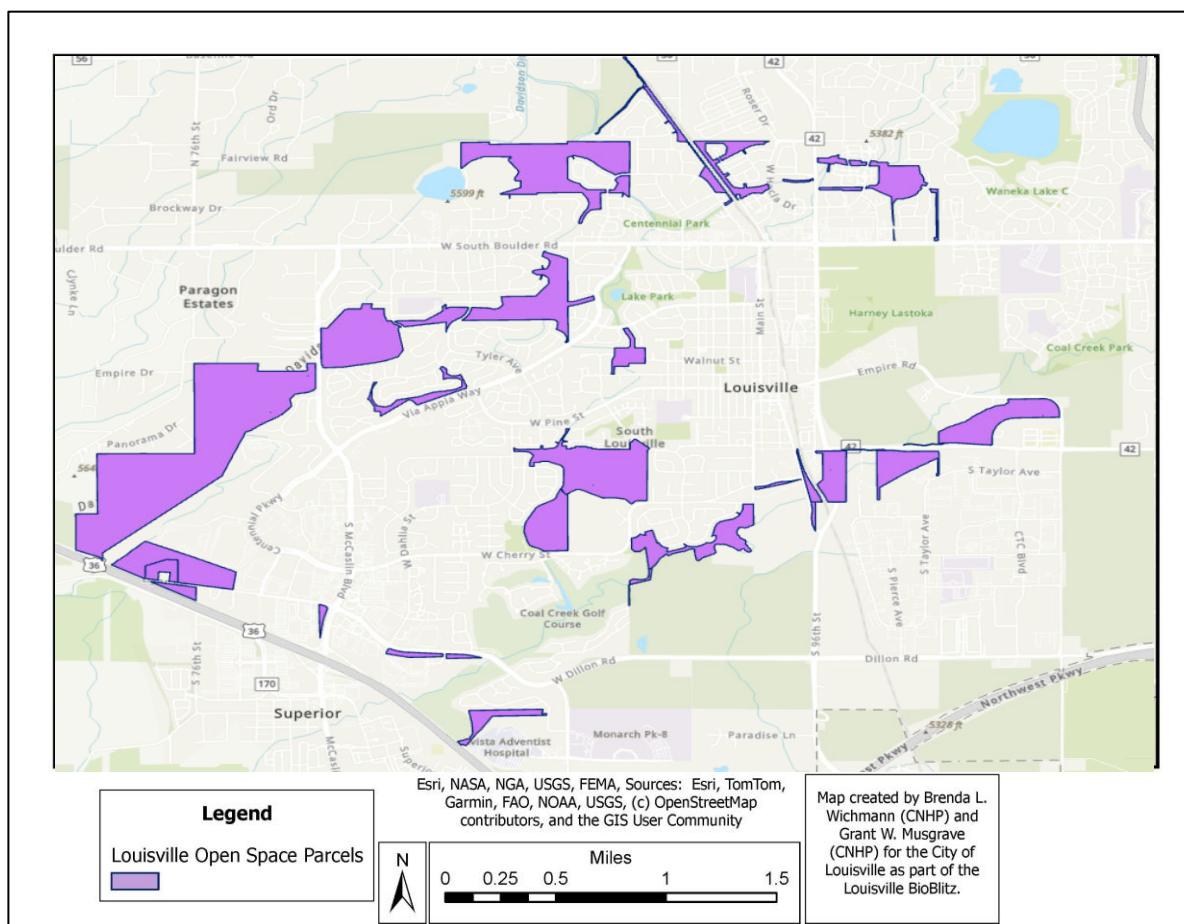
Field teams prioritized open space sites with the highest likelihood for biodiversity, culminating in the following sites being surveyed most heavily: Hecla Lake, Davidson Mesa, Harper Lake, and those along Coal Creek Trail (Avista, Dutch Creek, CTC, and Aquarius). Surveys included botanical inventories, arthropod and pollinator inventories, amphibian and mollusk inventories, bird inventories, mammal inventories, mycology inventories, bryophyte inventories, riparian inventories, and ecological community mapping. Data was primarily recorded using iNaturalist, with a few exceptions being recorded on tablets with GPS, Survey123, and ESRI Field Maps applications.

Volunteer engagement was coordinated through SignUpGenius, which allowed efficient scheduling and communication with participants. A total of 106 volunteers attended 14 field sessions. Sessions focused on birding, plant identification, insect identification, and ecology were the most popular, each reaching capacity within days of registration opening.

The BioBlitz was supported by a coordinated communications effort, led by CNHP and the City of Louisville Open Space, which included a formal press release, social media campaigns, and media coverage by Denver7, KUNC Radio, and CSU SOURCE. Posts from CNHP and City of Louisville's social media accounts reached over 15,000 viewers, increasing public awareness of local biodiversity and community science. The BioBlitz concluded with a Public Open House

held June 13, 2025, at the Louisville Recreation and Senior Center, where attendees met with CNHP scientists and interns, viewed specimens, and discussed preliminary findings.

In total, CNHP made over 1216 species observations across 15 sites. The project successfully met its objectives of expanding biodiversity data, strengthening community engagement, and contributing to ongoing conservation planning for the City of Louisville's natural areas.



Map 1: The City of Louisville's Open Space parcels: Aquarius Open Space, Bullhead Gulch Open Space, Coyote Run Open Space, CTC Open Space, Damyanovich Open Space, Daughenbaugh Open Space, Davidson Mesa Open Space, Dutch Creek Open Space, Gateway Open Space, Hecla Lake Open Space, Hillside Open Space, Leon A. Wurl Wildlife Sanctuary (Harper Lake), North Open Space, Walnut Open Space, Warembourg Open Space.

Acknowledgements

The help and generosity of the City of Louisville's Open Space staff is greatly appreciated. Nathaniel Goeckner, our primary contact for this project, played a critical role in event management and land access with the help of Kayla Corcelli. Additionally, Ginger Cross and Lauren Finamore played valuable roles in media outreach to City of Louisville citizens. Lastly, thank you to all City of Louisville Open Space staff for their time, supervision, and collaboration in organizing materials and managing volunteers.

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1.0 Media and Outreach

In alignment with the outreach goals outlined in the project scope, CNHP's Julie Kallenberger and the City of Louisville's Ginger Cross collaborated to produce a comprehensive communications campaign designed to engage the public, promote volunteer participation, and highlight biodiversity discoveries. Efforts spanned press outreach, digital media campaigns, news coverage, and public engagement events. This culminated in a strong regional response in the BioBlitz's participation as well as community awareness of the BioBlitz's scientific, conservation, and citizen science value. A special thank you to CSU's Warner College of Natural Resources Communications staff and interns and CNHP volunteer, Amy Hahn, for their work on event communications and outreach.

1.1 Press and Public Communications

A formal press release (**Figure 1**), titled "Discover the Wild Side of Louisville!", was issued jointly by the City of Louisville and CNHP on May 20, 2025. It announced the weeklong BioBlitz (June 9–13, 2025) and invited the public to participate in documenting species across 800 acres of open space. The release emphasized the event's scientific rigor and its contribution to Colorado's statewide biodiversity database.

The release also included statements from Nate Goeckner (City of Louisville Open Space) and Jess Cheadle (CNHP) on the event's importance. Details for volunteer registration, and the public open house on June 13, 2025, were included, as well as links to the official event page (www.LouisvilleCo.gov/BioBlitz), which included further details about registering and biographies of the participating scientists.

1.2 Social Media Campaign and Analytics

The City of Louisville's Ginger Cross and CNHP's Julie Kallenberger coordinated social media outreach via Instagram (@cnhp_social and @citylouisvilleco) and Facebook (Colorado Natural Heritage Program and City of Louisville, Colorado Government). Campaign posts reached thousands of viewers across platforms, combining educational messaging with calls to action for volunteer recruitment and event participation.

Highlights from the analytics report include:

- "Explore The Wild Side of Louisville!" — 2,648 views / 1,464 accounts reached / 61 likes
- "Discover The Wild Side of Louisville" — 2,614 views / 1,765 accounts reached / 31 likes

Collaboration posts with @citylouisvilleco and @csuwarnercollege received up to 4,613 views and 168 likes. Overall engagement exceeded 15,000 combined views and hundreds of likes and shares across reels and grid posts (**Figure 2**).

PRESS RELEASE

FOR IMMEDIATE RELEASE
May 20, 2025

MEDIA CONTACTS
Ginger Cross
720-296-7939 / gcross@louisvilleco.gov

Discover the Wild Side of Louisville! **City of Louisville and Colorado Natural Heritage Program Partner for Weeklong** **Biodiversity Survey**

LOUISVILLE, CO— The City of Louisville and the Colorado Natural Heritage Program (CNHP) at Colorado State University are partnering for a weeklong BioBlitz to uncover the diverse species that call Louisville's Open Space home. Taking place June 9–13, 2025, this large-scale scientific survey will span more than 800 acres of natural land and engage both professional scientists and local volunteers.

A BioBlitz is an intensive biological inventory in which experts and community members work together to document all living species—plants, animals, and invertebrates—within a designated area and timeframe. What sets this event apart is its scientific rigor: field surveys will be led by biologists using standardized protocols, producing high-quality data with long-term value for conservation planning.

"This is a rare opportunity to do real science alongside expert biologists," said Nate Goeckner, natural resource supervisor for the City of Louisville. "The data collected will fill critical gaps in our biodiversity records and contribute to statewide and national databases."

"We're thrilled to work with a community like Louisville that is embracing science to guide conservation," said Jess Cheadle, ecologist/botanist with CNHP. "This data will also contribute to CODEX the state's official biodiversity database."

How it works

Teams will use wildlife cameras, acoustic monitors, insect traps, plant transects, and visual surveys to collect data across a range of habitats. The findings will help:

- Fill data gaps in Colorado's biodiversity records
- Identify rare or imperiled species
- Support open space policy and restoration planning
- Provide Louisville's first official biodiversity baseline

Figure 1: City of Louisville Open Space BioBlitz Press Release 2025, written by Ginger Cross and Julie Kallenberger.

Join the effort: Community participation & volunteer opportunity

Public participation is at the heart of this effort. Community members can assist with surveys, species identification, event logistics, and more. Space is limited to 40-50 volunteers per day. Advanced registration will be required. Learn more and register at www.LouisvilleCo.gov/bioblitz

Public Event: BioBlitz Open House

Friday, June 13 at the Louisville Recreation & Senior Center (900 W Via Appia Way, Louisville CO). Hear from biologists, explore field data, and celebrate a week of scientific discovery!

EVENT DETAILS

What: Louisville BioBlitz 2025

When: June 9–13, 2025

Where: Various Louisville Open Space properties

Public Event: Open House, June 13 at the Louisville Recreation & Senior Center How to Get

Involved: Learn more and register at www.LouisvilleCo.gov/bioblitz Contacts:

- Questions about City of Louisville Open Space and properties: Nate Goeckner – NGoeckner@LouisvilleCo.gov
- Questions about volunteering, event logistics, and registration: Jess Cheadle - jess.cheadle@colostate.edu

Event website: www.LouisvilleCo.gov/bioblitz

About the City of Louisville Open Space

The City of Louisville's Open Space Division is committed to protecting and enhancing the natural areas that make our community special. These lands provide recreational opportunities for residents and visitors, support diverse wildlife and plant communities, and create visual buffers between Louisville and neighboring municipalities. Through stewardship, education, and collaboration, Open Space staff works to preserve biodiversity and promote a deep connection to the outdoors.

About the Colorado Natural Heritage Program

CNHP is a non-academic department housed within CSU's Warner College of Natural Resources and is Colorado's member of the NatureServe Network, an international network of programs that provides the foundational data and guidance for monitoring the status of species and natural plant communities from state, national and global perspectives. By collecting and analyzing ecological data, CNHP helps land managers, governments, and conservation organizations protect Colorado's biodiversity through science-based decision-making. Learn more at cnhp.colostate.edu.

Figure 1. (Continued)

Instagram Grid

**THANK YOU TO EVERYONE
WHO JOINED US FOR
LOUISVILLE'S FIRST-EVER
BIOBLITZ!**



1,491 Views
854 Accounts reached
64 Total likes

**DISCOVER LOUISVILLE'S
WILD SIDE!**



491 Views
147 Accounts reached
26 Total likes

**EXPLORE THE WILD SIDE OF
LOUISVILLE!**



2,648 Views
1,464 Accounts reached
61 Total likes

Instagram Grid

**DISCOVER THE WILD SIDE
OF LOUISVILLE!**

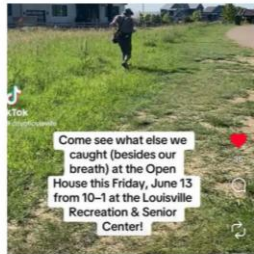


2,614 Views
1,765 Accounts reached
31 Total likes

Figure 2: CNHP's Louisville BioBlitz social media posts and analytics.

Instagram Reels

COLLAB WITH LOUISVILLECOPROS / CITYLOUISVILLECO



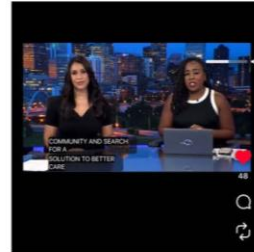
2,755 Views
1 Comments
35 Total likes
10 Share

COLLAB WITH LOUISVILLECOPROS / CSUWARNERCOLLEGE



3,796 Views
2 Comments
170 Total likes
4 Share

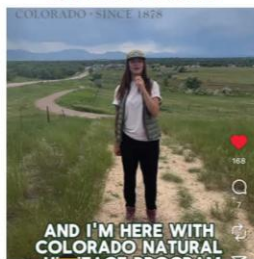
COLLAB WITH LOUISVILLECOPROS



1,942 Views
0 Comments
48 Total likes
10 Share

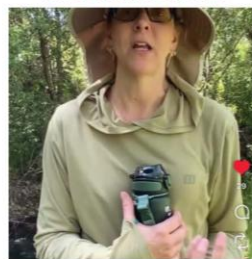
Instagram Reels

COLLAB WITH CSUWARNERCOLLEGE / CITYLOUISVILLECO



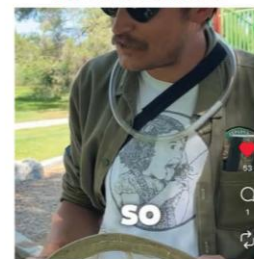
4,613 Views
7 Comments
168 Total likes
13 Share

COLLAB WITH LOUISVILLECOPROS



774 Views
0 Comments
29 Total likes
2 Share

COLLAB WITH LOUISVILLECOPROS / CITYLOUISVILLECO



2,190 Views
1 Comments
53 Total likes
8 Share

Figure 2: (Continued)

Instagram Reels



1,427 Views
1 Comments
49 Total likes
2 Share

Figure 2: (Continued)

1.3 Community Participation

Community participation (**Table 1**) for the Louisville BioBlitz (June 10–11, 2025) was managed using SignUpGenius, which enabled participants to pre-register for specific field events, reducing day-of-site congestion and ensuring balanced team sizes (typically 8–10 per session). Community members and scientists met at specified staging areas for their sessions, where water, bathrooms, and maps were provided. Harper Lake Trailhead was the staging area for the following open space parcels: Davidson Mesa, Harper Lake, Coyote Run, Gateway, and Damyanovich. Community Park was the staging area for the following open space parcels: Daughenbaugh, Warembourg, Dutch Creek, Avista, Aquarius, and CTC. Hecla Lake was the staging area for Hecla Lake and Bullhead. Keith Helart Park was the staging area for North Open Space. Each site maintained printed sign-in sheets with confirmed registrants and waitlisted registrants, as well as photo release documentation. Registrants were emailed upon signing up, as well as the day before, all necessary information including meetup location, safety information, and what to bring for their session. A total of 15 different sessions were held, covering the topics of ecology, entomology, botany, zoology, and wetland ecology. The session averaged, 2–3 hours in length.

Table 1: Summary of community participation at the Louisville BioBlitz 2025 including date, location, time, session title, and confirmed and waitlisted counts.

Date	Staging Location	Session / Activity	Time Slot	Participants	Waitlist
June 10, 2025	Hecla Lake	Bug Walk	8–10 a.m.	8	0
June 10, 2025	Keith Helart Park	Bug Walk	10 a.m.–12 p.m.	8	0
June 10, 2025	Davidson Mesa / Harper Lake	Birding	7–10 a.m.	7	8
June 10, 2025	Davidson Mesa / Harper Lake	Ecology	9 a.m.–12 p.m.	8	5
June 10, 2025	Davidson Mesa / Harper Lake	Plant Walk	9 a.m.–12 p.m.	8	5
June 10, 2025	Davidson Mesa / Harper Lake	Amphibian & Mollusk Surveys	10 a.m.–12 p.m.	8	4
June 10, 2025	Davidson Mesa / Harper Lake	Plant Walk	1–3 p.m.	7	4
June 10, 2025	Davidson Mesa / Harper Lake	Ecology	3–5 p.m.	7	4
June 11, 2025	Keith Helart Park	Birding	8–10 a.m.	8	3
June 11, 2025	Hecla Lake Open Space	Birding & Amphibian/Mollusk Surveys	10–11 a.m.	6	5
June 11, 2025	Davidson Mesa / Harper Lake	Bug Walk	8 a.m.–12 p.m.	8	3
June 11, 2025	Community Park	Ecology	9–12 p.m.	8	2
June 11, 2025	Community Park	Wetland Surveys	9 a.m.–12 p.m.	6	2
June 11, 2025	Community Park	Ecology	1–3 p.m.	6	2
June 11, 2025	Community Park	Wetland Surveys	1–5pm	3	0
TOTAL				106	47

In total, 106 community members participated across 15 sessions, with 47 individuals on waitlists. Most sessions reached capacity, reflecting strong community interest and engagement in land stewardship. Most participants were Louisville residents or Front Range community members, joined by a handful of CNHP staff, interns, and repeat volunteers active across multiple sessions.

1.4 Public Event: BioBlitz Open House

The BioBlitz Open House held June 13, 2025, at the Louisville Recreation & Senior Center, served as the culminating outreach event. Attendees met with CNHP scientists and interns, viewed plant/insect specimens and field data, and discussed findings in an informal, educational setting. Other presenters at the event were City of Louisville Noxious Weeds, City of Louisville Open Space, the Butterfly Pavilion, and Colorado Parks and Wildlife. The event drew hundreds of participants, and successfully connected community members, city staff, and the scientific team—enhancing transparency and enthusiasm for future community conservation efforts.

1.5 Media Coverage

The BioBlitz achieved significant regional visibility through multiple news outlets, including:

- [“Scientists, local volunteers take part in BioBlitz to catalog plants, insects in Louisville”](#)— KUNC Radio
- [“A Wild Partnership: Colorado Natural Heritage and City of Louisville bring science and discovery to urban natural areas”](#) — CSU SOURCE, Author Amy Hahn
- [“Scientists, volunteers to catalog all living species that call Louisville's open space home”](#) — Denver7 (ABC News)

These stories highlighted the collaborative nature of the project, the hands-on involvement of community members, and the contribution to statewide biodiversity data.

2.0. Methods

2.1 Botany

Botanical surveys for the 2025 City of Louisville Open Space BioBlitz were conducted on Monday, June 9, and Tuesday, June 10, 2025, by CNHP botanist Dr. Jennifer Ackerfield and Denver Botanic Gardens botanist My-Lan Le, with assistance from CNHP staff, Siegele Conservation Science Interns, and community volunteers. Community volunteers joined only for June 10. Monday June 9 was used as a scouting and 'researchers only' surveying day. The primary objective of the botany surveys was to build a comprehensive plant species list for Louisville's open space network using the iNaturalist platform as the primary data collection tool.

Botany observations were made at Daughenbaugh Open Space, Warembourg Open Space, Avista Open Space, Dutch Creek Open Space, CTC Open Space, Aquarius Open Space, Davidson Mesa, and Harper Lake. At each site, participants documented all identifiable vascular plant species encountered. Observations were photographed and uploaded to iNaturalist in real time, where identifications were reviewed and verified by CNHP botanists and the broader iNaturalist community.

2.2. Entomology

Entomological surveys for the 2025 City of Louisville Open Space BioBlitz were conducted to document arthropod diversity across a range of aquatic and terrestrial habitats within the City's open space system. Surveys were conducted on Monday, June 9th, Tuesday, June 10, 2025, and Wednesday June 11, 2025. Community volunteers joined only for June 10 and June 11. Monday June 9 was used as a scouting and 'researchers only' surveying day. The surveys were led by CNHP entomologist Tristan Kubik, with assistance from CNHP staff, Siegele Conservation Science Interns, and trained community volunteers. The primary objective was to build a comprehensive arthropod species list representing the diversity of insects and related taxa observed during the BioBlitz.

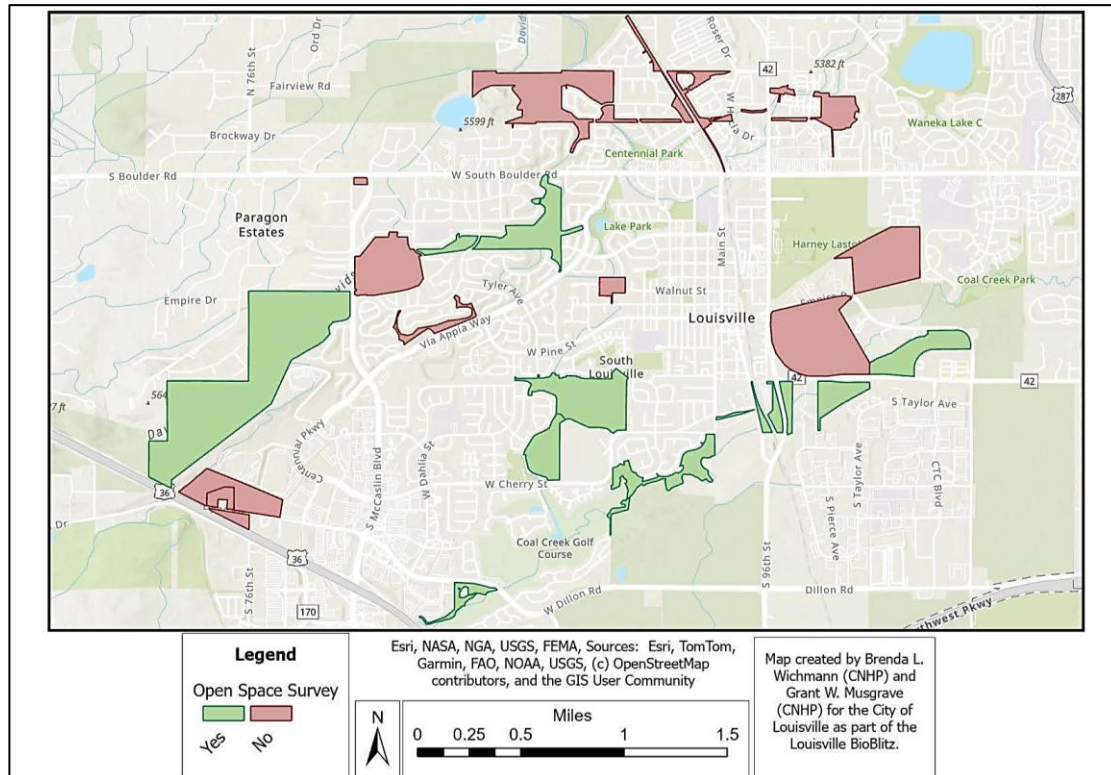
Surveys were conducted at Daughenbaugh Open Space, Warembourg Open Space, Dutch Creek Open Space, Avista Open Space, CTC Open Space, Hecla Lake, North Open Space, Davidson Mesa, and Harper Lake. Field activities included both terrestrial and aquatic sampling, employing multiple collection methods to capture a wide range of taxa and microhabitats. Terrestrial insects were collected using aerial sweep nets and aquatic invertebrates were sampled using dip nets in ponds, creeks, and wetland margins. Nocturnal sampling was also conducted using ultraviolet light traps, which attracted moths, beetles, and other night-active insects. All specimens were temporarily stored for identification and were photographed and uploaded to iNaturalist in real time where identifications were reviewed and verified by CNHP botanists and the broader iNaturalist community.

2.3 Vegetation Ecology

A cursory survey of the vegetation of Louisville Open Space properties was conducted by the CNHP and Bioblitz participants on June 9–11, 2025. An additional rapid assessment was conducted by Brenda L. Wichmann on September 4, 2025. Surveys were conducted at Davidson Mesa, Daughenbaugh Open Space, Warembourg Open Space, Dutch Creek Open Space, Coyote Run Open Space, CTC Open Space, a portion of the Coal Creek Regional Trail Corridor, and a portion of Aquarius Open Space (**Map 2**). Vegetation surveys were not conducted at North Open Space, Helca Lake, or Damyanovich Open Space (**Map 2**).

In addition to the cursory surveys, one vegetation plot was sampled on June 9th following methods outlined in Peet et al. (1998) and Lee et al. (1998), which meet the U.S. National Vegetation Classification (USNVC) standard (Jennings et al. 2009; Federal Geographic Data Committee Vegetation Subcommittee 2008). The protocol guide for this methodology is presented in (**Appendix A. Protocol Guide for USNVC Methodology**) and the plot data collected are presented in (**Appendix A. Protocol Guide for USNVC Methodology**).

The purpose of these surveys was to identify and map plant associations (natural plant communities) on Louisville Open Space properties as defined in the USNVC. Vegetation types were determined and mapped by CNHP Ecologist Brenda L. Wichmann and CNHP Botanist Grant Musgrave.



Map 2: Louisville Open Space parcels that were and were not surveyed for vegetation.

2.4 Zoology

Zoological fieldwork for the 2025 City of Louisville BioBlitz was led by CNHP Zoologist John Sovell, with assistance from CNHP staff, Siegle Conservation Science Interns, and City of Louisville Open Space personnel and community members. The objective of the zoology surveys was to document the presence and diversity of vertebrate wildlife species—including birds, amphibians, reptiles, small mammals, and mollusks—across representative open space properties within the City of Louisville.

Surveys were conducted from June 9–11, 2025, across multiple open space properties selected to represent a range of habitats within the Louisville landscape. Community volunteers joined only for June 10 and 11. Monday June 9 was used as a scouting and ‘researchers only’ surveying day. Sampling sites included:

- Coal Creek Riparian Corridor – bird surveys, acoustic bat monitoring, and mollusk, amphibian, and reptile surveys
- Dutch Creek Open Space and Davidson Mesa – small mammal trapping and bird surveys
- Aquarius Open Space and Davidson Mesa – prairie-dog colony and burrowing owl observations
- Leon A. Wurl Wildlife Sanctuary (Harper Lake) and Coyote Run Open Space – bird surveys and amphibian and mollusk surveys.
- Hecla Lake – birding, mollusk, and amphibian surveys.
- North Open Space – birding

Fieldwork was conducted using a combination of direct observation, auditory detection, and physical evidence recording. Wildlife occurrences were recorded through GPS waypoints and manual field notes, capturing the precise locations of all detected species.

- Avian Surveys: Conducted primarily during early morning hours using binoculars.
- Amphibian and Mollusk Surveys: Visual encounter searches were performed in riparian corridors, ponds, and wetlands.
- Small Mammal Surveys: Observations were made via small mammal traps which were placed overnight.
- Prairie Dog and Burrowing Owl Observations: Conducted via direct observation and GPS mapping of active burrows, colonies, and potential owl nesting sites.
- Bat Observations: Acoustic bat recorders were placed overnight.

All species detections were georeferenced using handheld GPS units and supplemented with manual field notes recorded in field notebooks. Location points and species information were later digitized and integrated into CNHP's spatial database. Verified records will be entered into CNHP's Biotics Database.

2.5 Wetland Ecology, Mycology, and Bryology

Surveys targeting bryophytes, fungi, and wetland vegetation were conducted during the 2025 City of Louisville BioBlitz to document non-vascular plant, fungal, and wetland community diversity across multiple open space properties. These efforts were led by CNHP field scientists and supported by Siegle Conservation Science Interns. The primary goal was to build baseline species lists and document habitat types that support moisture-dependent and decomposer taxa across the Louisville Open Space system.

Bryology Surveys

Bryophyte (moss and liverwort) surveys were performed in riparian corridors, shaded slopes, and moist lowland areas where microhabitats favored bryophyte establishment. Barbara Thiers and Mo Ewing conducted visual searches along streambanks, seeps, and under shaded vegetation, documenting species presence. Observations were photographed and entered into iNaturalist, where identifications were verified by bryology specialists.

Mycology Surveys

Fungal surveys were conducted concurrently with botanical efforts, focusing on identifying macrofungi (mushrooms, conks, and cup fungi) visible during early summer conditions. Mycologist Ed Ludbow searched decaying wood, soil, and leaf litter across diverse habitat types, including grassland edges, riparian woodlands, and shaded open space parcels. Fungal fruiting bodies were photographed and uploaded to iNaturalist for community-based identification and verification.

Wetland Ecology Surveys

Wetland ecology surveys were conducted in and around ponds, marshes, and riparian corridors along Coal Creek Corridor to identify hydrophytic species. Hanna Mohr and Luke Knaggs completed transects and vegetation observations in Survey123 and iNaturalist. These data will inform CNHP's broader wetland inventory and support vegetation mapping and conservation prioritization for the City of Louisville.

3.0 Results

In total, during the BioBlitz 1216 observations were taken by 47 observers. Presently, of those observations, 179 iNaturalist identifiers have found 459 different species. The most observed species from the BioBlitz were *Potentilla recta*, *Asclepias speciosa*, *Amorpha fruticosa*, *Salix exigua*, *Tradescantia occidentalis*, and *Linum lewisii*. The full species list is available on the iNaturalist BioBlitz page at [City of Louisville Open Space BioBlitz · iNaturalist](#).

3.1 Botany

In addition to the observations made during the BioBlitz, vascular plant iNaturalist data was pulled on June 12 for the City of Louisville to better understand the full diversity and threats to Louisville's Open Space. This resulted in a list of 468 different plant species. Of these species, in the City of Louisville there are 23 Colorado listed noxious weed species. There are also six species of concern that CNHP tracks, *Allium schoenoprasum*, *Ammannia robusta*, *Asclepias stenophylla*, *Cardamine breweri*, *Crataegus chrysocarpa*, and *Cyperus bipartitus* (**Table 3, Appendix B. CNHP Tracked Species of Concern in Louisville, CO**).

See **Table 6, Appendix C. Plant Species in Louisville, C** for a list of all plant species observations (BioBlitz observations included) in the City of Louisville, along with if they are a listed noxious weed, CNHP tracked species, and their global and state rankings. To see a comprehensive and evolving plant species list for Louisville, with location coordinates and number of observations, see the iNaturalist page here: [Observations · iNaturalist](#).

3.2. Entomology

In addition to the observations made during the BioBlitz, arthropod iNaturalist data was pulled on June 12 for the City of Louisville to better understand the full diversity and threats to Louisville's Open Space. This resulted in a list of 480 species, of which *Bombus occidentalis* and *Sympetrum madidum* are CNHP tracked species of concern. These species were found along Davidson Mesa Open Space (**Table 4, Appendix B. CNHP Tracked Species of Concern in Louisville, CO**).

Together, these datasets documented a broad spectrum of arthropod diversity across Louisville's open spaces. See **Table 7, Appendix D. Arthropod Species in Louisville, C** for a list of all arthropod species observations (BioBlitz observations included) in the City of Louisville, along with their global and state rankings and if they are a CNHP tracked species. To see a comprehensive and evolving arthropod species list for the City of Louisville, with location coordinates, see the iNaturalist page here: [Observations · iNaturalist](#).

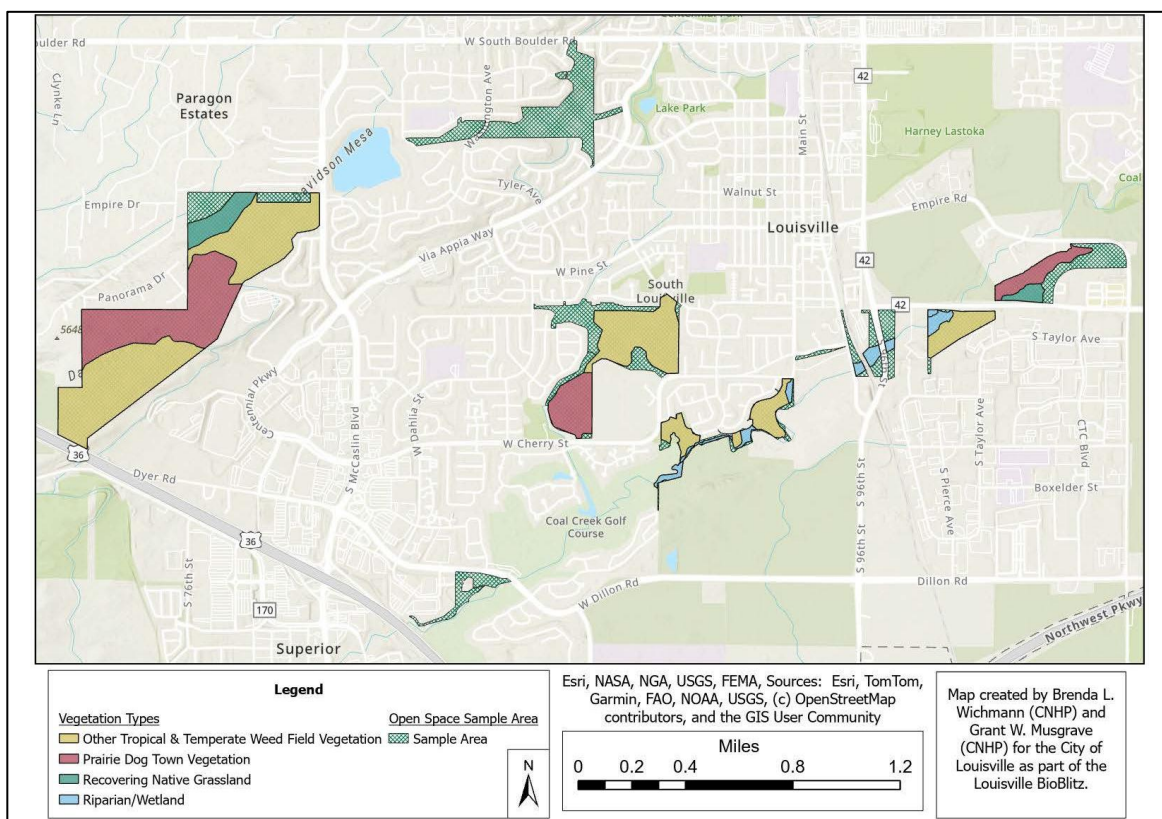
3.3 Vegetation Ecology

Results and Discussion

A map of City of Louisville Open Space properties is presented in **(Map 2)**. The vegetation of surveyed parcels is presented in **(Map 3)** and described below.

The vegetation of City of Louisville Open Space reflects its location within the Front Range Urban Corridor of Colorado. Historically, this area supported farming, including plowed agricultural fields. Today, the landscape is fragmented, supporting residential and commercial development, as well as open spaces and parks managed primarily for recreation. Non-native species such as smooth brome (*Bromus inermis*), cheatgrass (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), Siberian elm (*Ulmus pumila*), and crack willow (*Salix × fragilis*) occur in varying abundance across City of Louisville's Open Space parcels.

No examples of intact natural plant associations were found on the surveyed parcels, primarily due to the abundance of non-native species. The most intact example of native vegetation occurs on the northwest-facing slope of Davison Mesa, where plot data were collected **(Appendix A. Protocol Guide for USNVC Methodology)**.



Map 3: Vegetation map of surveyed parcels in the City of Louisville's Open Space

Davidson Mesa Open Space

Davidson Mesa is a gravel-capped pediment surface. The parcel is composed primarily of upland vegetation, with a small area of riparian and wetland vegetation associated with Davidson Ditch. The northwest-facing slope of this parcel supports the most intact example of native vegetation observed within Louisville Open Space.

The flat plateau of the mesa supports patchy and variable vegetation, influenced by past and current land use, soil rockiness, and the presence of prairie dog colonies. Native grasses indicative of natural grassland communities are present but scattered and in low abundance. The dominant vegetation consists of exotic grasses and forbs such as *Bromus inermis* (smooth brome), *Bromus japonicus* (Japanese brome), and *Rumex crispus* (curly dock). Additional exotic forbs include *Convolvulus arvensis* (field bindweed), *Salsola tragus* (tumbleweed), *Centaurea diffusa* (diffuse knapweed), *Bassia scoparia* (kochia), *Linaria dalmatica* (dalmatian toadflax), *Verbascum thapsus* (mullein), and *Medicago sativa* (alfalfa).

Native grasses present in scattered abundance include *Pascopyrum smithii* (western wheatgrass), *Schizachyrium scoparium* (little bluestem), and *Aristida purpurea* (purple threeawn). Native forbs include *Opuntia macrorhiza* (prairie pricklypear), *Artemisia ludoviciana* (silver wormwood), *Gutierrezia sarothrae* (broom snakeweed), *Liatris punctata* (dotted blazing star), and *Verbesina encelioides* (cowpen daisy).

The northwest-facing slope harbors the most intact native vegetation. Plot data documented 59 taxa, including 47 native to Colorado and 12 non-native species. Notable native grasses include *Andropogon gerardii* (big bluestem), *Hesperostipa comata* (needle-and-thread), *Koeleria macrantha* (prairie junegrass), *Aristida purpurea* (purple threeawn), and *Bouteloua curtipendula* (sideoats grama). Other characteristic species include *Yucca glauca*, *Heterotheca villosa* (hairy false goldenaster), *Gutierrezia sarothrae* (broom snakeweed), *Liatris punctata*, *Opuntia fragilis* (brittle pricklypear), and *Carex inops* ssp. *heliophila* (sun sedge). Full plot data are provided in **(Appendix A. Protocol Guide for USNVC Methodology)**

The composition of native grasses such as *Andropogon gerardii*, *Pascopyrum smithii*, *Hesperostipa comata*, and *Bouteloua curtipendula* suggests that Davidson Mesa may once have supported natural communities classified under the globally vulnerable (G3) Southern Great Plains Mixedgrass Prairie (USNVC Group G133). However, due to the high abundance of non-native species and the patchy, scattered distribution of native taxa, the vegetation no longer represents a natural community. The best fit within the USNVC is "Other Tropical & Temperate Weed Field Vegetation" (CSG031), which represents semi-natural vegetation including both native and non-native species.

Because the northwest-facing slope supports a relatively natural distribution of native species and fewer non-natives, it is mapped here as *recovering native grassland*. Areas

dominated by prairie dog colonies are mapped as Prairie Dog Town Vegetation. Riparian and wetland vegetation along Davidson Ditch was not surveyed.

Dutch Creek Open Space and Coal Creek Trail

Dutch Creek Open Space contains primarily upland vegetation with smaller areas of riparian and wetland vegetation. Riparian vegetation occurs along Dutch Creek and extends onto adjacent properties not owned by the City of Louisville. The canopy consists of both native and non-native species, including *Populus deltoides* (eastern cottonwood), *Fraxinus pennsylvanica* (green ash), *Salix exigua* (narrowleaf willow), and *Symphoricarpos occidentalis* (western snowberry), along with non-natives such as *Salix × fragilis* (crack willow), *Ulmus pumila* (Siberian elm), *Catalpa speciosa* (northern catalpa), and *Elaeagnus angustifolia* (Russian olive). The dominance of crack willow indicates this vegetation is not representative of a natural community. No USNVC type directly applies, and it is mapped as Riparian and Wetland Vegetation.

Small wetlands along Dutch Creek support native graminoids such as *Schoenoplectus pungens* (three-square bulrush) and *Carex nebrascensis* (Nebraska sedge), along with non-native species. Due to their small extent and prevalence of exotics, these are also mapped as Riparian and Wetland Vegetation.

Upland fields are dominated by *Bromus inermis* with scattered patches of *Pascopyrum smithii*, *Panicum virgatum* (switchgrass), and *Calamovilfa longifolia* (sand reedgrass). Native forbs include *Gutierrezia sarothrae*, *Grindelia squarrosa* (curlycup gumweed), and *Helianthus petiolaris* (prairie sunflower). These uplands are mapped as Other Tropical & Temperate Weed Field Vegetation (CSG031).

Daughenbaugh Open Space

Most of Daughenbaugh Open Space is occupied by a prairie dog colony, where vegetation is sparse and bare soil is common. Non-native species include *Rumex crispus* (curly dock), *Marrubium vulgare* (white horehound), *Saponaria officinalis* (common soapwort), *Cynoglossum officinale* (hound's-tongue), and *Bassia scoparia* (kochia). Scattered native forbs include *Verbesina encelioides* (cowpen daisy), *Brickellia eupatorioides* (false boneset), *Dieteria canescens* (hoary tansyaster), *Oenothera suffrutescens* (scarlet gaura), *Erigeron canadensis* (horseweed), and *Ambrosia psilostachya* (western ragweed). A small island of woody vegetation includes *Populus deltoides* (cottonwood), *Prunus* spp., and *Crataegus* spp. Areas along Goodhue Ditch were not surveyed. Surveyed areas are mapped as Prairie Dog Town Vegetation.

Warembourg Open Space

Warembourg Open Space is dominated by *Bromus inermis* and is mapped as Other Tropical & Temperate Weed Field Vegetation (CSG031). Areas along Goodhue Ditch were not surveyed.

Coyote Run Open Space

Coyote Run Open Space contains riparian and wetland vegetation dominated by a mix of native and non-native trees and shrubs, including *Populus deltoides* (cottonwood), *Salix exigua* (narrowleaf willow), *Fraxinus pennsylvanica* (green ash), and *Ribes* spp., along with non-natives such as *Malus domestica* (apple), and *Bromus inermis* (smooth brome). There were also patches of *Typha* spp. (cattails). This area is mapped as Riparian and Wetland Vegetation.

CTC Open Space

CTC Open Space is relatively small, with sloping uplands and a corner of riparian vegetation. The uplands are dominated by *Bromus inermis*, with scattered patches of *Pascopyrum smithii* and *Asclepias speciosa* (showy milkweed). The riparian zone supports *Populus deltoides* (cottonwood), *Fraxinus pennsylvanica* (green ash), and *Salix × fragilis* (crack willow). A small wetland dominated by *Typha angustifolia* (narrowleaf cattail) is also present.

Aquarius Open Space

The southwestern section of Aquarius Open Space was surveyed. The upland slope supports a mix of native and non-native grasses and forbs. Non-natives include *Bromus inermis* (smooth brome), *Bromus tectorum* (cheatgrass), and *Agropyron cristatum* (crested wheatgrass). Native grasses include *Aristida purpurea* (purple threeawn), *Pascopyrum smithii* (western wheatgrass), *Bouteloua gracilis* (blue grama), *Buchloe dactyloides* (buffalograss), and *Koeleria macrantha* (prairie junegrass). Native forbs include *Artemisia dracunculus* (tarragon), *Artemisia frigida* (fringed sagebrush), *Liatris punctata*, *Opuntia* spp. (pricklypear), *Chenopodium* spp. (goosefoot), *Eriogonum effusum* (spreading buckwheat), *Xanthisma spinulosum* (spiny goldenweed), and *Gutierrezia sarothrae*. The noxious weed *Centaurea diffusa* (diffuse knapweed) was also present.

The upland slope is mapped as recovering native grassland, while the lower slope, supporting a prairie dog colony, is mapped as Prairie Dog Town Vegetation.

Rare Plant Occurrences

Two CNHP tracked plants *Asclepias stenophylla* and *Crataegus chrysocarpa*, were found within the City of Louisville Open Space and added to Biotics (**Table 4, Appendix B. CNHP**

Tracked Species of Concern in Louisville, CO). For additional information on the population and habitat of these two species, see **Appendix B. CNHP Tracked Species of Concern in Louisville, CO.**

Summary

City of Louisville's Open Space parcels contain upland fields and grasslands, as well as riparian and wetland vegetation. Because no intact natural plant associations were found, vegetation could not be fully classified and mapped according to the USNVC's natural vegetation hierarchy. However, the USNVC also defines cultural or semi-natural vegetation types, which were applied here.

Most upland grasslands and fields are classified as Other Tropical & Temperate Weed Field Vegetation (CSG031). Two areas are mapped as recovering native grassland: the northwest slope of Davidson Mesa and the upland slope of Aquarius Open Space. Both support a relatively natural distribution of native species, with non-natives in lower abundance.

Riparian and wetland vegetation occupies the Coal Creek and Dutch Creek corridors, as well as along anthropogenic ditches (not surveyed in detail). These areas support native species such as *Populus deltoides*, *Populus angustifolia*, *Fraxinus pennsylvanica*, *Acer negundo*, *Salix exigua*, *Prunus virginiana*, and *Symphoricarpos occidentalis*. However, heavy dominance of non-natives such as *Salix × fragilis* and *Elaeagnus angustifolia* indicates alteration by human activity. Consequently, these areas are mapped as Riparian and Wetland Vegetation rather than as natural USNVC associations.

Native grasses recorded at Davidson Mesa, including *Andropogon gerardii*, *Pascopyrum smithii*, *Hesperostipa comata*, and *Bouteloua curtipendula*, suggest the site may once have been representative of the globally vulnerable Southern Great Plains Mixedgrass Prairie (G133). However, due to non-native dominance and altered conditions, no natural USNVC associations can currently be applied.

3.4 Zoology

In addition to the observations made during the BioBlitz (**Table 8, Appendix E. Animal Species in Louisville, CO**), mammal and herpetofauna iNaturalist data was pulled on June 12 for the City of Louisville to better understand the full diversity and threats to Louisville's Open Space (**Table 7, Appendix E. Animal Species in Louisville, CO**). Of these lists, three CNHP tracked species of concern were found *Cynomys ludovicianus*, *Lasionycteris noctivagans*, and *Lasiurus cinereus* (**Table 5, Appendix B. CNHP Tracked Species of Concern in Louisville, CO**).

To see a comprehensive and evolving animal species list for Louisville, with location coordinates and number of observations, see the iNaturalist page here: [Observations · iNaturalist](#).

3.5 Wetland Ecology, Bryology, and Mycology

Wetland Ecology

For wetland ecology plant results, please also see **Table 1, Appendix C. Plant Species in Louisville, C.**

Bryology

Three mosses were found, *Brachythecium erthorrhizon* and *Amblystegium serpens*, and *Cratoneuron felicinum*.

Mycology

For a list of moss and lichen species found in Louisville, CO, please see **(Table 10, Appendix F. Fungi Species in Louisville, CO)** as well as read the excerpt from Ed Ludbow below:

“On Monday afternoon, as part of the Louisville Biloblitz, Ikuko and I along with Nick and Jamie, found an extremely unusual mushroom in a cottonwood grove. Growing from wood, it had a blue stem and clear blue tints on the cap. Initially i guessed that it would be a *Leptonia*, a rare subgenus in Colorado of *Entoloma* – there are only three collections at DBG. On Thursday I made a quick microscope slide and took it into the herbarium and examined it. The spores from this collection are not what would be expected from a *Leptonia*, so I consulted with Roy Halling and he contacted an expert on that group to see what their thoughts might be. Their initial guess is that this may be an *Entocybe*, a recently described genus (2011) that has not yet been seen in Colorado, and, given some of the odd features, it has a reasonable chance of being an undescribed species.”

To see a comprehensive and evolving fungi species list for Louisville, with location coordinates and number of observations, see the iNaturalist page here: [Observations · iNaturalist](#).

4.0 References

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Musgrave, Grant, Brenda Wichmann, and Nico Tate. 2025. Colorado Natural Heritage Program Field Survey.

Peet R.K., Wentworth T.R., and White P.S. 1998. A flexible, multipurpose method for recording vegetation composition and structure. *Castanea*, **63**(3): 262–274.

Sovell, John. 2025. Colorado Natural Heritage Program Field Survey

Subcommittee, V., 2008. National vegetation classification standard, version 2.

Wichmann, Brenda. 2025. Colorado Natural Heritage Program Field Survey.

Appendix A. Protocol Guide for USNVC Methodology

To meet the U.S. National Vegetation Classification (USNVC) standards, specific data fields are required during field data collection. These data fields are outlined below and encompass vegetation characteristics, site information, and metadata.

Vegetation Data

Species List and Taxon Cover:

- A comprehensive list of all taxa observed in the plot, with cover class assignments, is presented in **Table 2**. Taxa are ordered by highest total cover class, then alphabetically.

Stratum Information:

- Herbaceous stratum: total cover = 83%; Predominant height = 1 m
- Tree and shrub strata: absent

Site Information

Location:

- Country/State/County: USA, Colorado, Boulder County
- Habitat: Rocky upland slope with grassland vegetation within urban open space.
- Geographic Location: Northwest-facing slope of Davidson Mesa, within the City of Louisville Open Space system, Boulder County, Colorado.
- Stand History: Past land use included farming on Davidson Mesa. However, it is likely that the northwest-facing slope where the plot was collected escaped plowing due to its slope and rocky surface. Current land use is recreation, and the property is managed by the City of Louisville as Open Space.

Abiotic Factors

- Elevation: 1,709 m (5,607 ft)
- Slope: 12°
- Aspect: 326° (NW)
- Topographic Position: hill
- Landform and Geology: Gravel-capped pediment surface of Davidson Mesa, underlain by Quaternary alluvial gravels over Cretaceous sedimentary bedrock of the Denver Basin.

Soil and Water Features

- Soil Drainage: well-drained (presumed, soil profile not obtained).
- Soil Texture: loamy surface with gravelly inclusions
- Hydrology: upland

Site Conditions

- Landscape Context: Rocky upland mesa at the transition between the Great Plains and the Front Range foothills; managed as Louisville Open Space for recreation, wildlife habitat, and conservation, within a wildland–urban interface.

- Land use: recreation
- Former land use: farming.
- Homogeneity of Vegetation: homogeneous stand
- Phenological Phase: typical growing season
- Stand Maturity / Successional Status: Late-successional grassland, considered mature, though altered by past land use and invasion by non-native species; best described as semi-natural grassland.
- Physiognomy: herbaceous
- Evidence of Disturbance: Presence of non-native, introduced species.

Soil Surface Characteristics (% cover):

- Litter: 2%
- Rock (gravel/cobble): 4%
- Bare ground: 3%
- Coarse woody debris: 0%
- Fine woody debris: 2%
- Duff: 0%
- Bryophyte: 0%
- Water: 0%

Soil Composition (%):

- Mineral soil: 96%
- Gravel/cobble: 4%
- Boulder: 0%
- Bedrock: 0%
- Histosol: 0%

Geographic Data

- Essential for accurately locating and referencing the plot.
- *Coordinates (WGS 84 / NAD83 datum):*
- Latitude: 39.97791
- Longitude: -105.172
- UTM Zone: 13N
- Easting: 485297
- Northing: 4425338
- Location Accuracy: 9 m
- Field Coordinates: Original coordinates and datum used: 39.97791, -105.172, WGS 84
- Narrative Information: Plot is located on the mid-upper slope, below and north of the maintained gravel trail, and west-northwest of the foot trail that diagonally bisects the slope.

Metadata

Project Information:

- Plot Number: 200-01-01
- Project Name: Louisville Bioblitz
- Plot Area: 1,000 m² (0.1 ha)
- Sampling Level: 4
- Effort Level: very thorough
- Vascular Taxonomic Accuracy: high
- Bryophyte Taxonomic Accuracy: not sampled.
- Lichen Taxonomic Accuracy: not sampled.
- Taxonomic Standard: Ackerfield (2022)

Sampling Methodology:

- Peet R.K., Wentworth T.R., and White P.S. 1998. A flexible, multipurpose method for recording vegetation composition and structure. *Castanea*, **63**(3): 262–274. Plots were laid out following standard relevé plot dimensions (20 × 50 m).

Floristic Data Gathering:

- Very thorough; all vascular taxa observed were recorded.

Cover Scale and Strata Types:

- Species cover was estimated visually using cover classes described by Peet et al. (1998).

Personnel:

- Grant Musgrave, Nicholas Tate, Brenda L. Wichmann, Louisville Bioblitz volunteers

Observation Date:

- June 9, 2025

Stand Selection:

- Representative of vegetation found on NW-facing slope of Davison Mesa. Stand size 3–10× plot size.

Homogeneity:

- Plot placed in a homogeneous stand reflecting typical species co-occurrence under common environmental and historical conditions.

Temporal Considerations:

- Sampled during typical growing season; repeat visits may be needed to fully capture species composition

Table 2. Plot data including species list and taxon cover.

A comprehensive list of all taxa observed in the plot is presented. Taxa are ordered by highest total cover class, then alphabetically. *CTotal* = cover class for the entire plot; *C2*, *C3*, *C8*, *C9* = cover class by modules 2, 3, 8, and 9, respectively; *CR* = cover class for the residual module. Methodology follows Peet et al. (1998); see Peet et al. and Lee et al. (2008) for more information.

CTotal	Taxon Name	C2	C3	C8	C9	CR	Native/Exotic
6	<i>Heterotheca villosa</i>	5	5	7	6	-	Native
5	<i>Agropyron cristatum</i>	-	6	-	4	-	Exotic
5	<i>Andropogon gerardii</i>	6	-	2	6	-	Native
4	<i>Hesperostipa comata</i>	5	2	2	4	-	Native
3	<i>Aristida purpurea</i>	4	2	-	4	-	Native
3	<i>Carex inops</i>	4	2	2	4	-	Native
3	<i>Erigeron canadensis</i>	-	4	2	-	-	Native
3	<i>Koeleria macrantha</i>	3	-	2	4	-	Native
3	<i>Yucca glauca</i>	4	4	4	3	-	Native
2	<i>Alyssum sp.</i>	2	-	-	-	-	Exotic
2	<i>Ambrosia psilostachya</i>	2	2	2	2	-	Native
2	<i>Antennaria sp.</i>	-	-	-	-	2	Native
2	<i>Argemone polyanthemus</i>	2	2		3	-	Native
2	<i>Artemisia campestris</i>	-	-	-	-	2	Native
2	<i>Artemisia dracunculus</i>	2	-	-	3	-	Native
2	<i>Artemisia frigida</i>		2	1	-	-	Native
2	<i>Artemisia ludoviciana</i>	-	-	-	-	2	Native
2	<i>Bouteloua curtipendula</i>	-	-	-	3	-	Native
2	<i>Bromus inermis</i>	4	-	-	-	-	Exotic
2	<i>Bromus tectorum</i>	-	-	2	2	-	Exotic
2	<i>Camelina alyssum</i>	2	-	-	-	-	Exotic
2	<i>Chenopodium album</i>	2	-	-	2	-	Exotic
2	<i>Chenopodium berlandieri</i>	2	2	1	2	-	Native
2	<i>Dalea purpurea</i>	2	-	-	2	-	Native
2	<i>Echinocereus viridiflorus</i>	2	1	1	2	-	Native
2	<i>Ellisia nyctelea</i>	2	1	1	-	-	Native
2	<i>Erigeron flagellaris</i>	2	2	2	3	-	Native
2	<i>Gutierrezia sarothrae</i>	-	-	-	-	2	Native
2	<i>Lactuca serriola</i>	2	1	1	2	-	Exotic
2	<i>Lappula occidentalis</i>	-	2	2	2	-	Native

Table 2. Plot data including species list and taxon cover.

A comprehensive list of all taxa observed in the plot is presented. Taxa are ordered by highest total cover class, then alphabetically. *CTotal* = cover class for the entire plot; *C2*, *C3*, *C8*, *C9* = cover class by modules 2, 3, 8, and 9, respectively; *CR* = cover class for the residual module. Methodology follows Peet et al. (1998); see Peet et al. and Lee et al. (2008) for more information.

CTotal	Taxon Name	C2	C3	C8	C9	CR	Native/Exotic
2	<i>Liatris punctata</i>	4	-	-	-	-	Native
2	<i>Lomatium orientale</i>	2	-	1	2	-	Native
2	<i>Mirabilis linearis</i>	-	-	2	2	-	Native
2	<i>Oenothera serrulata</i>	2	-	-	3	-	Native
2	<i>Oenothera suffrutescens</i>	3	2	-	-	-	Native
2	<i>Opuntia fragilis</i>	2	-	-	2	-	Native
2	<i>Opuntia macrorhiza</i>	2	2	2	2	-	Native
2	<i>Pascopyrum smithii</i>	-	-	2	-	-	Native
2	<i>Pediomelum tenuiflorum</i>	2	2	2	2	-	Native
2	<i>Physalis pumila</i>	-	-	-	-	2	Native
2	<i>Poa pratensis</i>	3	-	-	3	-	Exotic
2	<i>Rosa arkansana</i>	-	-	-	-	2	Native
2	<i>Silene antirrhina</i>	2	2	2	2	-	Native
2	<i>Sisymbrium altissimum</i>	-	-	-	2	-	Exotic
2	<i>Symphyotrichum</i> sp.	-	-	-	2	-	Native
2	<i>Thelesperma megapoticum</i>	2	2	2	3	-	Native
2	<i>Tradescantia occidentalis</i>	2	2	2	3	-	Native
2	<i>Tragopogon dubius</i>	2	2	2	2	-	Exotic
2	<i>Verbascum thapsus</i>	2	-	-	-	-	Exotic
2	<i>Viola nuttalianus</i>	2	-	1	2	-	Native
1	<i>Asclepias stenophylla</i>	2	-	-	-	-	Native
1	<i>Cirsium</i> sp.	-	1	1	-	-	Native
1	<i>Comandra umbellata</i>	1	-	-	-	-	Native
1	<i>Eriogonum effusum</i>	2	2	-	-	-	Native
1	<i>Festuca octoflora</i>	-	-	-	-	1	Native
1	<i>Mertensia lanceolata</i>	-	-	-	-	1	Native
1	<i>Penstemon</i> sp.	-	-	1	-	-	Native
1	<i>Plantago patagonica</i>	-	-	-	1	-	Native
1	<i>Taraxacum officinale</i>	-	1	-	-	-	Exotic

Appendix B. CNHP Tracked Species of Concern in Louisville, CO

Table 3: CNHP tracked plant species of concern found in Louisville, CO, including location coordinates and global and state rarity ranks.				
Scientific Name	Common Name	Location	Global Rarity Rank	State Rarity Rank
<i>Allium schoenoprasum</i>	Chives	Not Public Information	G5	S1
<i>Ammannia robusta</i>	Grand Redstem	Not Public Information	G5	S2
<i>Asclepias stenophylla</i>	Narrow-leaved Milkweed	Not Public Information	G4G5	S2
<i>Cardamine breweri</i>	Brewer's Bittercress	Not Public Information	G5	S1
<i>Crataegus chrysocarpa</i>	Fireberry Hawthorn	Not Public Information	G5	S2
<i>Cyperus bipartitus</i>	Slender Flatsedge	Not Public Information	G5	S2

Extra Plant Element Occurrence Record Data

Asclepias stenophylla– Number of individuals: 1 (3 stems). Phenology: fruit. Reproductive success: three stems each with one fruit, additional peduncles on plant without fruit and appear to have aborted, damaged, or been eaten. No obvious signs of disease, predation, or injury. This occurrence supports one individual in one mapped area [Musgrave et al. 2025]. Location is Davidson Mesa, a popular recreation area, however, this individual is removed from trails on slope. Unlikely that it will face threats from recreation; however, it is likely to be threatened by cattle grazing or mowing [Musgrave et al. 2025] [Wichmann 2025]. Habitat is rocky grasslands, north-west facing slope. Dominant plant community: disturbed grassland; the northwest-facing slope of Davidson Mesa includes native and non-native, introduced plant taxa. Plot data documented 59 taxa, including 47 native to Colorado and 12 non-native species. Notable native grasses include *Andropogon gerardii* (big bluestem), *Hesperostipa comata* (needle-and-thread), *Koeleria maranta* (prairie junegrass), *Aristida purpurea* (purple threeawn), and *Bouteloua curtipendula*

(sideoats grama). Other characteristic species include *Yucca glauca* (small soapweed), *Heterotheca villosa* (hairy false goldenaster), *Gutierrezia sarothrae* (broom snakeweed), *Liatris punctata* (dotted blazing star), *Opuntia fragilis* (brittle pricklypear), and *Carex inops ssp. heliophila* (sun sedge). Aspect: 326 degrees. Slope: 12%. Slope shape: open. Moisture: dry. Geomorphic landform: slope of gravel-capped pediment surface [Wichmann 2025]. Somewhat disturbed *Andropogon gerardii* mixed grass prairie on slope between heavily weedy flat mesa and depressional wetland. Topographic position: midslope. Slope shape: straight. Light exposure: open. Geology: Laramie Formation and Fox Hills Sandstone. Geomorphic landform: mesa [Musgrave et al. 2025].

Crataegus chrysocarpa- Number of individuals: 1-3. Reproductive success: immature fruit. Found along the riparian corridor of Coal Creek.

Table 4: CNHP tracked arthropod species of concern found in Louisville, CO, including location coordinates and global and state rarity ranks.				
Scientific Name	Common Name	Location	Global Rarity Rank	State Rarity Rank
<i>Bombus occidentalis</i>	Western Bumble Bee	39.97506, -105.16878	G3	S3S4
<i>Sympetrum madidum</i>	Red-veined Meadowfly	39.99010, -105.15940	G5	S2

Table 5: CNHP tracked animal species of concern found in Louisville, CO, including location coordinates and global and state rarity ranks.				
Scientific Name	Common Name	Location	Global Rarity Rank	State Rarity Rank
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	39.97598, -105.17205	G4	S3
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	39.9675, -105.1467	G4	S3
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	39.9762, -105.1214	G4	S3
<i>Lasionycteris noctivagans</i>	Silver-haired Bat	39.97756, -105.16245 (Location obscured 48m)	G5	S4
<i>Lasiurus cinereus</i>	Hoary Bat	39.99741, -105.11659	G5	S4

		(Location obscured 244m)		
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Extra Animal Element Occurrence Record Data

Cynomys ludovicianus (Davidson Mesa Colony)–Davidson Mesa: Number of individuals: 36. Ages: 25 adults, 11 juveniles. Only the individuals on Louisville Open Space property were counted. This colony includes more individuals in area off the open space that were not counted. The colony was large with what appeared to be high reproductivity. Reproductive evidence: yes, juveniles were observed. Evidence of disease, predation, or injury: no. [Sovell 2011]

Cynomys ludovicianus (Daughenbaugh Colony)–Number of individuals: 37. Ages: 27 adults, 10 juveniles. The colony was densely populated and seemed to have a high reproductive rate. Reproductive evidence: yes, juveniles were observed. Evidence of disease, predation or injury: no. The population of the colony was large and healthy. [Sovell 2025]

Cynomys ludovicianus (Aquarius Colony)–Number of individuals: 14. Ages: 12 adults, 2 juveniles. Only the individuals on Aquarius Open Space property were counted. This colony includes more individuals on Mayhoffer Open Space that were not counted. Reproductive evidence: yes, juveniles were observed. Evidence of disease, predation or injury: no. The population of the colony seemed small with few juveniles. [Sovell 2025]

Appendix C. Plant Species in Louisville, CO

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Acer negundo</i>	Boxelder				
<i>Acer saccharinum</i>	Silver Maple				
<i>Acer tataricum</i>	Tatarian Maple				
<i>Achillea filipendulina</i>	Fern-Leaf Yarrow				
<i>Achillea millefolium</i>	Common Yarrow				
<i>Aesculus hippocastanum</i>	Horse-Chestnut				
<i>Agoseris glauca</i>	Pale Agoseris				
<i>Agropyron cristatum</i>	Crested Wheatgrass				
<i>Alcea rosea</i>	Hollyhock				
<i>Alliaria petiolata</i>	Garlic Mustard	Watch List			
<i>Allium schoenoprasum</i>	Chives		Tracked	G5	S1
<i>Allium textile</i>	Textile Onion				
<i>Alyssum</i>	Alyssum				
<i>Alyssum desertorum</i>	Desert Madwort				
<i>Alyssum simplex</i>	Field Alison				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Ambrosia psilostachya</i>	Western Ragweed				
<i>Ambrosia trifida</i>	Giant Ragweed				
<i>Amelanchier alnifolia</i>	Saskatoon				
<i>Ammannia robusta</i>	Grand Redstem		Tracked	G5	S2
<i>Amorpha fruticosa</i>	False Indigo Bush				
<i>Andropogon gerardi</i>	Big Bluestem				
<i>Anemonoides blanda</i>	Greek Anemone				
<i>Anemopsis californica</i>	Yerba Mansa				
<i>Aphyllon fasciculatum</i>	Clustered Broomrape				
<i>Apocynum cannabinum</i>	Hemp Dogbane				
<i>Aquilegia coerulea</i>	Blue Columbine				
<i>Arctium minus</i>	Common Burdock	List C			
<i>Argemone polyanthemos</i>	Thistle Poppy				
<i>Aristida purpurea</i>	Purple Threeawn				
<i>Artemisia dracunculus</i>	Tarragon				
<i>Artemisia frigida</i>	Fringed Sagebrush				
<i>Artemisia ludoviciana</i>	Silver Wormwood				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Artemisia tridentata</i>	Big Sagebrush				
<i>Asclepias incarnata</i>	Swamp Milkweed				
<i>Asclepias pumila</i>	Plains Milkweed				
<i>Asclepias speciosa</i>	Showy Milkweed				
<i>Asclepias stenophylla</i>	Narrow-leaved Milkweed		Tracked	G4G5	S2
<i>Asclepias tuberosa</i>	Butterfly Milkweed				
<i>Asclepias viridiflora</i>	Green Comet Milkweed				
<i>Asparagus officinalis</i>	Wild Asparagus				
<i>Asperugo procumbens</i>	Madwort				
<i>Astragalus agrestis</i>	Field Milkvetch				
<i>Astragalus canadensis</i>	Canadian Milkvetch				
<i>Astragalus cicer</i>	Chickpea Milkvetch				
<i>Astragalus crassicaupus</i>	Ground-Plum				
<i>Astragalus drummondii</i>	Drummond'S Milkvetch				
<i>Astragalus flexuosus</i>	Flexible Milkvetch				
<i>Astragalus shortianus</i>	Early Purple Milkvetch				
<i>Astragalus tridactylicus</i>	Foothill Milkvetch				
<i>Atriplex canescens</i>	Fourwing Saltbush				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Barbarea vulgaris</i>	Garden Yellowrocket				
<i>Bassia scoparia</i>	Summer-Cypress				
<i>Berberis aquifolium</i>	Oregon Grape				
<i>Berberis repens</i>	Creeping Mahonia				
<i>Berteroa incana</i>	Hoary Alyssum	Watch List			
<i>Borago officinalis</i>	Borage				
<i>Bouteloua curtipendula</i>	Sideoats Grama				
<i>Bouteloua dactyloides</i>	Buffalograss				
<i>Bouteloua gracilis</i>	Blue Grama				
<i>Brickellia suaveolens</i>	Great Plains False Boneset				
<i>Bromus inermis</i>	Smooth Brome				
<i>Bromus japonicus</i>	Japanese Brome				
<i>Bromus tectorum</i>	Cheatgrass	List C			
<i>Buglossoides arvensis</i>	Corn Gromwell				
<i>Callirhoe involucrata</i>	Winecup Mallow				
<i>Camelina microcarpa</i>	Littlepod False Flax				
<i>Campanula glomerata</i>	Clustered Bellflower				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Campanula petiolata</i>	Western Harebell				
<i>Campanula rapunculoides</i>	Creeping Bellflower				
<i>Campsis radicans</i>	American Trumpet Vine				
<i>Capsella bursa-pastoris</i>	Shepherd's-Purse				
<i>Caragana arborescens</i>	Siberian Peashrub				
<i>Cardamine breweri</i>	Brewer's Bittercress		Tracked	G5	S2
<i>Carduus nutans</i>	Musk Thistle	List B			
<i>Carex brevior</i>	Shortbeak Sedge				
<i>Castilleja miniata</i>	Giant Red Indian Paintbrush				
<i>Castilleja sessiliflora</i>	Downy Paintbrush				
<i>Catalpa speciosa</i>	Northern Catalpa				
<i>Centaurea cyanus</i>	Cornflower				
<i>Centaurea diffusa</i>	Diffuse Knapweed	List B			
<i>Centaurea stoebe</i>	Spotted Knapweed	List B			
<i>Cerastium arvense</i>	Field Chickweed				
<i>Ceratocephala testiculata</i>	Curveseed Butterwort				
<i>Cercocarpus montanus</i>	Alderleaf Mountain Mahogany				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Chamaebatiaria millefolium</i>	Fernbush				
<i>Chamaenerion angustifolium</i>	Fireweed				
<i>Chenopodiastrum simplex</i>	American Maple-Leaved Goosefoot				
<i>Chenopodium album</i>	Common Lambsquarters				
<i>Chorisporea tenella</i>	Crossflower				
<i>Cichorium intybus</i>	Chicory	List C			
<i>Cirsium arvense</i>	Creeping Thistle	List B			
<i>Cirsium ochrocentrum</i>	Yellowspine Thistle				
<i>Cirsium undulatum</i>	Wavyleaf Thistle				
<i>Cirsium vulgare</i>	Bull Thistle	List B			
<i>Claytonia rosea</i>	Madrean Springbeauty				
<i>Cleomella serrulata</i>	Rocky Mountain Beeplant				
<i>Coeloxylosteum</i>	Eurasian Bush Honeysuckles				
<i>Collomia linearis</i>	Narrow-Leaf Mountain Trumpet				
<i>Comandra umbellata</i>	Bastard Toadflax				
<i>Conium maculatum</i>	Poison Hemlock	List C			

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Convallaria majalis</i>	European Lily Of The Valley				
<i>Convolvulus arvensis</i>	Field Bindweed	List C			
<i>Coreopsis tinctoria</i>	Plains Coreopsis				
<i>Coreopsis verticillata</i>	Whorled Coreopsis				
<i>Cornus sericea</i>	Red Osier Dogwood				
<i>Cosmos bipinnatus</i>	Garden Cosmos				
<i>Cota tinctoria</i>	Golden Marguerite				
<i>Cotinus coggygria</i>	Smokebush				
<i>Cotinus obovatus</i>	American Smoketree				
<i>Crataegus chrysocarpa</i>	Fireberry Hawthorn		Tracked	G5	S2
<i>Crataegus douglasii</i>	Black Hawthorn				
<i>Crataegus marshallii</i>	Parsley Hawthorn				
<i>Crocasmia masoniorum</i> <i>crocasmia paniculata</i>	Giant Zigzag Montbretia				
<i>Cucurbita moschata</i>	Squash				
<i>Cylindropuntia imbricata</i>	Tree Cholla				
<i>Cynoglossum officinale</i>	Hound's-Tongue	List B			
<i>Cyperus bipartitus</i>	Slender Flatsedge		Tracked	G5	S2

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Cyperus squarrosus</i>	Bearded Flatsedge				
<i>Dactylis glomerata</i>	Orchard Grass				
<i>Dalea candida</i>	White Prairie Clover				
<i>Dalea purpurea</i>	Purple Prairie Clover				
<i>Dasiphora fruticosa</i>	Shrubby Cinquefoil				
<i>Datura wrightii</i>	Sacred Datura				
<i>Daucus carota</i>	Queen Anne'S Lace				
<i>Delphinium carolinianum</i>	Wild Blue Larkspur				
<i>Delphinium carolinianum virescens</i>	Prairie Larkspur				
<i>Delphinium geyeri</i>	Plains Larkspur				
<i>Delphinium nuttallianum</i>	Upland Larkspur				
<i>Descurainia sophia</i>	Flixweed				
<i>Dianthus armeria</i>	Deptford Pink				
<i>Dipsacus fullonum</i>	Common Teasel	List B			
<i>Dipsacus laciniatus</i>	Cutleaf Teasel	List B			
<i>Draba verna</i>	Common Whitlowgrass				
<i>Dyssodia papposa</i>	Fetid Marigold				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Echinocereus viridiflorus</i>	Green-Flower Hedgehog Cactus				
<i>Echinocereus viridiflorus viridiflorus</i>	Green-Flower Hedgehog Cactus				
<i>Echinochloa crus-galli</i>	Barnyardgrass				
<i>Elaeagnus angustifolia</i>	Russian Olive	List B			
<i>Ellisia nyctelea</i>	Aunt Lucy				
<i>Elymus elymoides</i>	Squirreltail				
<i>Elymus smithii</i>	Western Wheatgrass				
<i>Epilobium ciliatum</i>	Fringed Willowherb				
<i>Epilobium hirsutum</i>	Great Willowherb				
<i>Equisetum laevigatum</i>	Smooth Horsetail				
<i>Eragrostis cilianensis</i>	Stinkgrass				
<i>Eragrostis minor</i>	Little Lovegrass				
<i>Eremogone fendleri</i>	Fendler's Sandwort				
<i>Ericameria nauseosa</i>	Rubber Rabbitbrush				
<i>Erigeron canadensis</i>	Horseweed				
<i>Erigeron divergens</i>	Spreading Fleabane				
<i>Eriocoma hymenoides</i>	Sand Ricegrass				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Eriogonum alatum</i>	Winged Buckwheat				
<i>Eriogonum effusum</i>	Spreading Buckwheat				
<i>Erodium cicutarium</i>	Redstem Stork's-Bill	List C			
<i>Erysimum asperum</i>	Prairie-Rocket Wallflower				
<i>Erysimum capitatum</i>	Western Wallflower				
<i>Eschscholzia californica</i>	California Poppy				
<i>Escobaria missouriensis</i>	Missouri Foxtail Cactus				
<i>Euphorbia brachycera</i>	Horned Spurge				
<i>Euphorbia davidii</i>	David'S Spurge				
<i>Euphorbia esula</i>	Leafy Spurge	List B			
<i>Euphorbia maculata</i>	Spotted Spurge				
<i>Euphorbia marginata</i>	Snow-On-The-Mountain				
<i>Euphorbia myrsinites</i>	Myrtle Spurge	List A			
<i>Euphorbia prostrata</i>	Prostrate Sandmat				
<i>Euphorbia serpens</i>	Matted Sandmat				
<i>Euphorbia serpillifolia</i>	Thymeleaf Sandmat				
<i>Euphorbia virgata</i>	Slender Leafy Spurge				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Euphrosyne xanthiifolia</i>	Marshelder				
<i>Euthamia occidentalis</i>	Western Goldenrod				
<i>Evolvulus nuttallianus</i>	Shaggy Dwarf Morning-Glory				
<i>Fallugia paradoxa</i>	Apache Plume				
<i>Frasera speciosa</i>	Monument Plant				
<i>Fraxinus pennsylvanica</i>	Green Ash				
<i>Fumaria vaillantii</i>	Few-Flowered Fumitory				
<i>Gaillardia grandiflora</i>	Hybrid Blanketflower				
<i>Gaillardia aristata</i>	Great Blanketflower				
<i>Gaillardia pulchella</i>	Firewheel				
<i>Galium aparine</i>	Catchweed Bedstraw				
<i>Gentiana affinis</i>	Pleated Gentian				
<i>Geranium caespitosum</i>	Pinewoods Geranium				
<i>Geum aleppicum</i>	Yellow Avens				
<i>Gilia clokeyi</i>	Clokey'S Gilia				
<i>Glandularia bipinnatifida</i>	Dakota Mock Vervain				
<i>Glycyrrhiza lepidota</i>	Wild Licorice				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Grimmia pulvinata</i>	Grey-Cushioned Grimmia				
<i>Grindelia squarrosa</i>	Curlycup Gumweed				
<i>Grindelia subalpina</i>	Subalpine Gumweed				
<i>Gutierrezia sarothrae</i>	Broom Snakeweed				
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree				
<i>Halerpestes cymbalaria</i>	Alkali Buttercup				
<i>Helianthus annuus</i>	Common Sunflower				
<i>Helianthus pumilus</i>	Little Sunflower				
<i>Heliomeris multiflora</i>	Showy Goldeneye				
<i>Hesperis matronalis</i>	Dame's Rocket	List B			
<i>Hesperostipa comata</i>	Needle-And-Thread Grass				
<i>Heterotheca villosa</i>	Hairy False Goldenaster				
<i>Hibiscus trionum</i>	Flower-Of-An-Hour				
<i>Hordeum jubatum</i>	Foxtail Barley				
<i>Humulus neomexicanus</i>	Western Hops				
<i>Hylotelephium mottramianum</i>	Autumn Joy				
<i>Hypericum perforatum</i>	Common St. John's Wort				

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Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Iris germanica</i>	Bearded Iris				
<i>Iris pallida</i>	Sweet Iris				
<i>Iris pseudacorus</i>	Yellow Flag Iris	List A			
<i>Juglans nigra</i>	Eastern Black Walnut				
<i>Juncus balticus</i>	Baltic Rush				
<i>Juncus compressus</i>	Flattened Rush				
<i>Juncus torreyi</i>	Torrey's Rush				
<i>Juniperus communis</i>	Common Juniper				
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper				
<i>Koeleria macrantha</i>	Prairie Junegrass				
<i>Koeleria paniculata</i>	Golden Rain Tree				
<i>Krascheninnikovia lanata</i>	Winterfat				
<i>Lactuca pulchella</i>	Common Blue Lettuce				
<i>Lactuca serriola</i>	Prickly Lettuce				
<i>Lamium amplexicaule</i>	Henbit Deadnettle				
<i>Lamium galeobdolon argentatum</i>	Variegated Yellow Archangel				
<i>Lappula occidentalis</i>	Flatspine Stickseed				

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Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Lathyrus latifolius</i>	Broad-Leaved Sweet Pea				
<i>Lemna minor</i>	Common Duckweed				
<i>Leonurus cardiaca</i>	Common Motherwort				
<i>Lepidium latifolium</i>	Pepperweeds				
<i>Lepidium campestre</i>	Field Peppergrass				
<i>Lepidium chalepense</i>	Lens-Podded Hoary Cress				
<i>Lepidium draba</i>	Hoary Cress	List B			
<i>Lepidium latifolium</i>	Broadleaved Pepperweed				
<i>Lepidium perfoliatum</i>	Clasping Pepperweed				
<i>Leucanthemum vulgare</i>	Oxeye Daisy	List B			
<i>Leucocrinum montanum</i>	Common Starlily				
<i>Liatris punctata</i>	Dotted Gayfeather				
<i>Ligustrum vulgare</i>	Common Privet				
<i>Linaria dalmatica</i>	Dalmatian Toadflax	List B			
<i>Linaria maroccana</i>	Annual Toadflax				
<i>Linaria vulgaris</i>	Yellow Toadflax	List B			
<i>Linum lewisii</i>	Lewis Flax				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Linum perenne</i>	Perennial Flax				
<i>Linum pratense</i>	Meadow Flax				
<i>Lithospermum incisum</i>	Narrowleaf Puccoon				
<i>Lithospermum multiflorum</i>	Manyflowered Gromwell				
<i>Lithospermum occidentale</i>	Western False Gromwell				
<i>Lolium perenne</i>	Perennial Ryegrass				
<i>Lomatium orientale</i>	Oriental Desert-Parsley				
<i>Lonicera tatarica</i>	Tatarian Honeysuckle				
<i>Lotus corniculatus</i>	Bird'S-Foot Trefoil				
<i>Lotus tenuis</i>	Narrow-Leaf Bird'S-Foot Trefoil				
<i>Lunaria annua</i>	Annual Honesty				
<i>Lupinus argenteus</i>	Silvery Lupine				
<i>Lycium barbarum</i>	Matrimony Vine				
<i>Lycopus americanus</i>	American Bugleweed				
<i>Lygodesmia juncea</i>	Rush Skeletonplant				
<i>Lysimachia ciliata</i>	Fringed Loosestrife				
<i>Lythrum salicaria</i>	Purple Loosestrife	List A			

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Machaeranthera tanacetifolia</i>	Tahoka Daisy				
<i>Maianthemum racemosum amplexicaule</i>	Western Solomon's Plume				
<i>Maianthemum stellatum</i>	Star-Flowered Lily-Of-The-Valley				
<i>Malus domestica</i>	Apple				
<i>Malva neglecta</i>	Dwarf Mallow				
<i>Marrubium vulgare</i>	White Horehound				
<i>Matricaria discoidea</i>	Pineapple-Weed				
<i>Medicago lupulina</i>	Black Medick				
<i>Medicago sativa</i>	Alfalfa				
<i>Melilotus albus</i>	White Sweetclover				
<i>Melilotus officinalis</i>	Yellow Sweetclover				
<i>Melissa officinalis</i>	Lemon Balm				
<i>Mertensia lanceolata</i>	Prairie Bluebells				
<i>Mirabilis jalapa</i>	Marvel Of Peru				
<i>Mirabilis linearis</i>	Narrowleaf Four O'Clock				
<i>Mirabilis nyctaginea</i>	Wild Four O'Clock				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Monarda fistulosa</i>	Wild Bergamot				
<i>Monarda pectinata</i>	Plains Beebalm				
<i>Muscari armeniacum</i>	Garden Grape-Hyacinth				
<i>Musineon divaricatum</i>	Leafy Wildparsley				
<i>Nassella viridula</i>	Green Needlegrass				
<i>Nasturtium officinale</i>	Watercress				
<i>Nepeta cataria</i>	Catnip				
<i>Nepeta racemosa</i>	Eastern Cat-Mint				
<i>Nothocalais cuspidata</i>	Prairie False Dandelion				
<i>Nuttallanthus texanus</i>	Texas Toadflax				
<i>Nymphaea odorata</i>	American White Waterlily				
<i>Oenothera albicaulis</i>	White-Stem Evening Primrose				
<i>Oenothera cespitosa</i>	Fragrant Evening Primrose				
<i>Oenothera curtiflora</i>	Velvetweed				
<i>Oenothera gaura</i>	Biennial Beeblossom				
<i>Oenothera howardii</i>	Howard's Evening Primrose				
<i>Oenothera macrocarpa</i>	Bigfruit Evening Primrose				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Oenothera nuttallii</i>	White-Stemmed Evening-Primrose				
<i>Oenothera serrulata</i>	Yellow Sundrops				
<i>Oenothera suffrutescens</i>	Scarlet Beeblossom				
<i>Oenothera villosa</i>	Hairy Evening Primrose				
<i>Onobrychis viciifolia</i>	Sainfoin				
<i>Onopordum acanthium</i>	Scotch Thistle	List B			
<i>Opuntia cymochila</i>	Grassland Pricklypear				
<i>Opuntia fragilis</i>	Brittle Pricklypear				
<i>Opuntia macrorhiza</i>	Prairie Pricklypear				
<i>Opuntia polyacantha</i>	Plains Pricklypear				
<i>Oxalis corniculata</i>	Creeping Woodsorrel				
<i>Oxalis dillenii</i>	Slender Yellow Woodsorrel				
<i>Oxybasis glauca</i>	Oak-Leaved Goosefoot				
<i>Oxytropis lambertii</i>	Lambert'S Locoweed				
<i>Packera plattensis</i>	Prairie Groundsel				
<i>Panicum capillare</i>	Witch Grass				
<i>Panicum virgatum</i>	Switchgrass				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Papaver orientale</i>	Oriental Poppy				
<i>Papaver rhoeas</i>	Common Poppy				
<i>Parthenocissus quinquefolia</i>	Virginia Creeper				
<i>Pediocactus simpsonii</i>	Mountain Ball Cactus				
<i>Pedimelum tenuiflorum</i>	Slimflower Scurfpea				
<i>Penstemon angustifolius</i>	Broadbeard Beardtongue				
<i>Penstemon grandiflorus</i>	Large-Flowered Beardtongue				
<i>Penstemon secundiflorus</i>	Sidebells Penstemon				
<i>Penstemon strictus</i>	Rocky Mountain Beardtongue				
<i>Penstemon virgatus</i>	Upright Blue Beardtongue				
<i>Penstemon virgatus asa-grayi</i>	Gray's Beardtongue				
<i>Persicaria amphibia</i>	Water Smartweed				
<i>Persicaria maculosa</i>	Lady'S Thumb				
<i>Phalaris arundinacea</i>	Reed Canary Grass				
<i>Phemeranthus confertiflorus</i>	Rocky Mountain Fameflower				
<i>Phlox multiflora</i>	Flowery Phlox				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Phyla cuneifolia</i>	Wedgeleaf Frogfruit				
<i>Physalis longifolia</i>	Long-Leaved Groundcherry				
<i>Physaria montana</i>	Mountain Bladderpod				
<i>Picea pungens</i>	Blue Spruce				
<i>Pilosella aurantiaca</i>	Orange Hawkweed	List A			
<i>Pinus contorta</i>	Lodgepole Pine				
<i>Pinus edulis</i>	Colorado Pinyon				
<i>Pinus scopulorum</i>	Rocky Mountains Ponderosa Pine				
<i>Plantago lanceolata</i>	Ribwort Plantain				
<i>Plantago major</i>	Greater Plantain				
<i>Plantago major major</i>	Common Plantain				
<i>Plantago patagonica</i>	Woolly Plantain				
<i>Poa bulbosa</i>	Bulbous Bluegrass				
<i>Poa compressa</i>	Canada Bluegrass				
<i>Polygonum aviculare</i>	Prostrate Knotweed				
<i>Populus acuminata</i>	Lanceleaf Cottonwood				
<i>Populus alba</i>	White Poplar				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Populus deltoides</i>	Eastern Cottonwood				
<i>Populus deltoides monilifera</i>	Plains Cottonwood				
<i>Populus tremuloides</i>	Quaking Aspen				
<i>Portulaca oleracea</i>	Common Purslane				
<i>Potamogeton nodosus</i>	Longleaf Pondweed				
<i>Potentilla indica</i>	Mock Strawberry				
<i>Potentilla recta</i>	Sulphur Cinquefoil	List B			
<i>Prunella vulgaris</i>	Common Selfheal				
<i>Prunus americana</i>	American Plum				
<i>Prunus padus</i>	Bird Cherry				
<i>Prunus tomentosa</i>	Nanking Cherry				
<i>Prunus virginiana</i>	Chokecherry				
<i>Pseudotsuga menziesii</i>	Douglas Fir				
<i>Quincula lobata</i>	Purple Groundcherry				
<i>Ranunculus aquatilis</i>	Common Water-Crowfoot				
<i>Ranunculus sceleratus</i>	Cursed Crowfoot				
<i>Ratibida columnifera</i>	Upright Prairie Coneflower				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Ratibida pinnata</i>	Grey-Headed Coneflower				
<i>Rayjacksonia annua</i>	Viscid Camphor-Daisy				
<i>Rhamnus cathartica</i>	Common Buckthorn				
<i>Rhaponticum repens</i>	Russian Knapweed	List B			
<i>Rhus</i>	Sumacs				
<i>Rhus aromatica</i>	Fragrant Sumac				
<i>Rhus glabra</i>	Smooth Sumac				
<i>Rhus trilobata</i>	Skunkbush Sumac				
<i>Rhus typhina</i>	Staghorn Sumac				
<i>Ribes alpinum</i>	Mountain Currant				
<i>Ribes aureum</i>	Golden Currant				
<i>Ribes cereum</i>	Wax Currant				
<i>Robinia pseudoacacia</i>	Black Locust				
<i>Rosa arkansana</i>	Prairie Rose				
<i>Rosa woodsii</i>	Woods' Rose				
<i>Rubus deliciosus</i>	Rocky Mountain Raspberry				
<i>Rubus idaeus</i>	Red Raspberry				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Rudbeckia hirta</i>	Black-Eyed Susan				
<i>Rumex</i>	Docks And Sorrels				
<i>Rumex crispus</i>	Curly Dock				
<i>Rumex fueginus</i>	Golden Dock				
<i>Rumex venosus</i>	Winged Dock				
<i>Sagittaria</i>	Common Arrowheads				
<i>Sagittaria latifolia</i>	Broadleaf Arrowhead				
<i>Sagittaria sagittifolia</i>	Sagittifolia Group				
<i>Salix amygdaloides</i>	Peachleaf Willow				
<i>Salix exigua</i>	Narrowleaf Willow				
<i>Salix exigua exigua</i>	Narrow-Leaved Willow				
<i>Salsola tragus</i>	Russian Thistle				
<i>Salvia floriferior</i>	Russian Sage				
<i>Salvia pratensis</i>	Meadow Sage				
<i>Salvia reflexa</i>	Mintweed				
<i>Sambucus canadensis</i>	American Black Elderberry				
<i>Sambucus nigra</i>	European Black Elderberry				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Saponaria ocymoides</i>	Rock Soapwort				
<i>Saponaria officinalis</i>	Common Soapwort				
<i>Scabiosa columbaria</i>	Small Scabious				
<i>Schizachyrium scoparium</i>	Little Bluestem				
<i>Schoenoplectus pungens</i>	Three-Square Bulrush				
<i>Schoenoplectus tabernaemontani</i>	Soft-Stemmed Bulrush				
<i>Scilla luciliae</i>	Boissier'S Glory-Of-The-Snow				
<i>Scorzonera laciniata</i>	Mediterranean Serpent-Root				
<i>Scutellaria brittonii</i>	Britton'S Skullcap				
<i>Securigera varia</i>	Purple Crownvetch				
<i>Sedum lanceolatum</i>	Lanceleaf Stonecrop				
<i>Senecio integerrimus</i>	Tall Western Groundsel				
<i>Senecio spartioides</i>	Broom-Like Ragwort				
<i>Senecio vulgaris</i>	Common Groundsel				
<i>Setaria pumila</i>	Yellow Foxtail				
<i>Setaria viridis</i>	Green Bristle Grass				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Shepherdia argentea</i>	Silver Buffaloberry				
<i>Silene antirrhina</i>	Sleepy Catchfly				
<i>Silene drummondii</i>	Drummond'S Champion				
<i>Silene latifolia</i>	White Champion				
<i>Sisymbrium altissimum</i>	Tall Tumblemustard				
<i>Solanum nigrum</i>	Black Nightshade				
<i>Solanum rostratum</i>	Buffalo-Bur				
<i>Solanum triflorum</i>	Cutleaf Nightshade				
<i>Solidago missouriensis</i>	Missouri Goldenrod				
<i>Solidago rigida</i>	Stiff-Leaved Goldenrod				
<i>Sonchus oleraceus</i>	Common Sow-Thistle				
<i>Sophora nuttalliana</i>	Silky Sophora				
<i>Sphaeralcea coccinea</i>	Scarlet Globemallow				
<i>Stachys byzantina</i>	Woolly Hedgenettle				
<i>Stigeoclonium</i>					
<i>Symphoricarpos occidentalis</i>	Western Snowberry				
<i>Symphyotrichum ciliatum</i>	Rayless Annual Aster				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Symphyotrichum ericoides</i>	White Heath Aster				
<i>Symphyotrichum lanceolatum</i>	Panicled Aster				
<i>Symphytum officinale</i>	Common Comfrey				
<i>Syringa vulgaris</i>	Common Lilac				
<i>Tamarix ramosissima</i>	Saltcedar	List B			
<i>Tanacetum parthenium</i>	Feverfew				
<i>Taraxacum officinale</i>	Common Dandelion				
<i>Thelesperma megapotamicum</i>	Rayless Greenthread				
<i>Thermopsis rhombifolia</i>	Golden Bean				
<i>Thinopyrum intermedium</i>	Intermediate Wheatgrass				
<i>Thlaspi arvense</i>	Field Penny-Cress				
<i>Toxicodendron rydbergii</i>	Western Poison Ivy				
<i>Tradescantia occidentalis</i>	Western Spiderwort				
<i>Tragopogon dubius</i>	Yellow Salsify				
<i>Tragopogon porrifolius</i>	Purple Salsify				
<i>Tribulus terrestris</i>	Puncture Vine	List C			

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Trifolium fragiferum</i>	Strawberry Clover				
<i>Trifolium hybridum</i>	Alsike Clover				
<i>Trifolium pratense</i>	Red Clover				
<i>Trifolium repens</i>	White Clover				
<i>Tripleurospermum inodorum</i>	Scentless Mayweed				
<i>Triticum aestivum</i>	Bread Wheat				
<i>Typha</i>	Cattails				
<i>Typha angustifolia</i>	Narrow-Leaved Cattail				
<i>Typha latifolia</i>	Broad-Leaved Cattail				
<i>Ulmus americana</i>	American Elm				
<i>Ulmus pumila</i>	Siberian Elm	List C			
<i>Verbascum blattaria</i>	Moth Mullein	List B			
<i>Verbascum thapsus</i>	Common Mullein	List C			
<i>Verbena bracteata</i>	Bigbract Verbena				
<i>Verbena hastata</i>	Blue Vervain				
<i>Verbesina encelioides</i>	Cowpen Daisy				
<i>Veronica anagallis-aquatica</i>	Blue Water-Speedwell				

Table 6: Plant species observed in Louisville, Colorado and their noxious weed status, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	CO Noxious Weed Status	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Veronica persica</i>	Bird'S-Eye Speedwell				
<i>Viburnum lantana</i>	Wayfaring-Tree				
<i>Viburnum opulus</i>	Guelder-Rose				
<i>Vicia americana</i>	American Vetch				
<i>Vinca major</i>	Greater Periwinkle				
<i>Vinca minor</i>	Lesser Periwinkle				
<i>Viola canadensis</i>	Canada Violet				
<i>Viola nuttallii</i>	Nuttall's Violet				
<i>Vitis vinifera</i>	Wine Grape				
<i>Xanthisma spinulosum</i>	Spiny Goldenweed				
<i>Xanthium strumarium</i>	Rough Cocklebur				
<i>Yucca glauca</i>	Great Plains Yucca				
<i>Zinnia elegans</i>	Elegant Zinnia				

Appendix D. Arthropod Species in Louisville, CO

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Acanalonia bivittata</i>	Two-striped Planthopper	Insecta			
<i>Aciurina bigeloviae</i>	Cotton-gall Tephritid	Insecta			
<i>Aciurina trixa</i>	Bubble-gall tephritid	Insecta			
<i>Acrolophitus hirtipes</i>	Green Fool Grasshopper	Insecta			
<i>Acronicta americana</i>	American Dagger	Insecta			
<i>Adalia bipunctata</i>	Two-spotted Lady Beetle	Insecta			
<i>Adelphocoris lineolatus</i>	Alfalfa Plant Bug	Insecta			
<i>Aedes nigromaculis</i>	Pasture Mosquito	Insecta			
<i>Aedes vexans</i>	Inland Floodwater Mosquito	Insecta			
<i>Aelia americana</i>	Cereal Bug	Insecta			
<i>Aeshna palmata</i>	Paddle-tailed Darner	Insecta			
<i>Agelenopsis</i>	Grass Spiders	Arachnida			
<i>Ageneotettix deorum</i>	White-whiskered grasshopper	Insecta			
<i>Aglais milberti</i>	Milbert's Tortoiseshell	Insecta			
<i>Agonopterix alstroemeriana</i>	Poison hemlock moth	Insecta			
<i>Agroiconota bivittata</i>	Two-banded Tortoise Beetle	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Agrotis venerabilis</i>	Venerable Dart	Insecta			
<i>Allonemobius allardi</i>	Allard's Ground Cricket	Insecta			
<i>Amara aenea</i>	Common Sun Beetle	Insecta			
<i>Amphion floridensis</i>	Nessus Sphinx	Insecta			
<i>Amydria obliquella</i>	Acrolophid Moth	Insecta			
<i>Anagrapha falcifera</i>	Celery Looper Moth	Insecta			
<i>Anasa tristis</i>	Squash Bug	Insecta			
<i>Anatis labiculata</i>	Fifteen-spotted Lady Beetle	Insecta			
<i>Anatis lecontei</i>	LeConte's Giant Lady Beetle	Insecta			
<i>Anatrytone logan</i>	Delaware Skipper	Insecta			
<i>Anavitrinella pampinaria</i>	Common Gray	Insecta			
<i>Anax junius</i>	Common Green Darner	Insecta			
<i>Andrena sp.</i>	Mining Bees	Insecta			
<i>Andrena milwaukeensis</i>	Milwaukee Mining Bee	Insecta			
<i>Antheraea polyphemus</i>	Polyphemus Moth	Insecta			
<i>Anthidium manicatum</i>	European Woolcarder Bee	Insecta			
<i>Anthophora urbana</i>	Urbane Digger Bee	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Anthrenus sp.</i>	Carpet Beetles	Insecta			
<i>Antistrophus pisum</i>	Rush Skeletonplant Pea Gall Wasp	Insecta			
<i>Apamea amputatrix</i>	Yellow-headed Cutworm Moth	Insecta			
<i>Apamea devastator</i>	Glassy Cutworm Moth	Insecta			
<i>Aphis nerii</i>	Oleander Aphid	Insecta			
<i>Apiomerus montanus</i>	Mountain Bee Assassin	Insecta			
<i>Apiomerus spissipes</i>	Plains Bee Assassin	Insecta			
<i>Apis mellifera</i>	Western Honey Bee	Insecta			
<i>Aquarius remigis</i>	North American Common Water Strider	Insecta			
<i>Aradus quadrilineatus</i>	Fungus Bug	Insecta			
<i>Araneus gemmoides</i>	Cat-faced Orbweaver	Arachnida			
<i>Archilestes grandis</i>	Great Spreadwing	Insecta			
<i>Argia alberta</i>	Paiute Dancer	Insecta			
<i>Argia vivida</i>	Vivid Dancer	Insecta			
<i>Argynnis aphrodite</i>	Aphrodite Fritillary	Insecta			
<i>Argynnis edwardsii</i>	Edwards's Fritillary	Insecta			
<i>Argynnis mormonia</i>	Mormon Fritillary	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Armadillidium vulgare</i>	Common Pill Woodlouse	Crustacea			
<i>Arphia conspersa</i>	Speckle-winged Rangeland Grasshopper	Insecta			
<i>Ascalapha odorata</i>	Black Witch	Insecta			
<i>Asteromyia carbonifera</i>	Carbonifera goldenrod gall midge	Insecta			
<i>Athysanus argentarius</i>	Silver Leafhopper	Insecta			
<i>Attulus fasciger</i>	Asiatic Wall Jumping Spider	Arachnida			
<i>Autographa californica</i>	Alfalfa Looper	Insecta			
<i>Bactericera maculipennis</i>	Bindweed Psyllid	Insecta			
<i>Banasa euchlora</i>	Juniper Stink Bug	Insecta			
<i>Batyle suturalis</i>	Sutured Longhorn Beetle	Insecta			
<i>Belostoma sp.</i>		Insecta			
<i>Bembix americana</i>	American Sand Wasp	Insecta			
<i>Bleptina caradrinalis</i>	Bent-winged Owlet	Insecta			
<i>Boisea sp.</i>	Boxelder Bugs	Insecta			
<i>Boisea trivittata</i>	Eastern Boxelder Bug	Insecta			
<i>Bombus appositus</i>	White-shouldered Bumble Bee	Insecta			
<i>Bombus bimaculatus</i>	Two-spotted Bumble Bee	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Bombus centralis</i>	Great Basin Bumble Bee	Insecta			
<i>Bombus fervidus</i>	Golden Northern Bumble Bee	Insecta			
<i>Bombus fraternus</i>	Southern Plains Bumble Bee	Insecta			
<i>Bombus griseocollis</i>	Brown-belted Bumble Bee	Insecta			
<i>Bombus huntii</i>	Hunt's Bumble Bee	Insecta			
<i>Bombus nevadensis</i>	Nevada Bumble Bee	Insecta			
<i>Bombus occidentalis</i>	Western Bumble Bee	Insecta	Tracked	G3	S3S4
<i>Bombus pensylvanicus</i>	American Bumble Bee	Insecta			
<i>Bombus rufocinctus</i>	Red-belted Bumble Bee	Insecta			
<i>Brachymelecta californica</i>	California Digger-cuckoo Bee	Insecta			
<i>Brachymelecta interrupta</i>	Interrupted Digger-cuckoo Bee	Insecta			
<i>Brachystola magna</i>	Plains Lubber Grasshopper	Insecta			
<i>Burnsius communis</i>	Common Checkered-Skipper	Insecta			
<i>Caenurgina erechtea</i>	Forage Looper Moth	Insecta			
<i>Caliroa cerasi</i>	Cherry Slug Sawfly	Insecta			
<i>Calliphora vicina</i>	Blue Blowfly	Insecta			
<i>Calopteryx maculata</i>	Ebony Jewelwing	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Calvia quatuordecimguttata</i>	Cream-spotted Ladybird	Insecta			
<i>Cassida rubiginosa</i>	Thistle Tortoise Beetle	Insecta			
<i>Catocala amatrix</i>	Sweetheart Underwing	Insecta			
<i>Ceratocapsus apicalis</i>	Plant Bug	Insecta			
<i>Ceratomia undulosa</i>	Waved Sphinx	Insecta			
<i>Ceroxys latiusculus</i>	Narrow-Banded Picture-Winged Fly	Insecta			
<i>Chalcoela iphitalis</i>	Sooty-winged Chalcoela Moth	Insecta			
<i>Chalybion californicum</i>	Common Blue Mud-dauber Wasp	Insecta			
<i>Charidotella sexpunctata</i>	Golden Tortoise Beetle	Insecta			
<i>Chauliognathus basalis</i>	Colorado Soldier Beetle	Insecta			
<i>Chelymorpha cassidea</i>	Argus Tortoise Beetle	Insecta			
<i>Chinavia hilaris</i>	Green Stink Bug	Insecta			
<i>Chlorion aerarium</i>	Steel-blue Cricket-hunter Wasp	Insecta			
<i>Chlorochroa ligata</i>	Conchuela Bug	Insecta			
<i>Chlorochroa sayi</i>	Say's Stink Bug	Insecta			
<i>Chlorochroa uhleri</i>	Uhler's Stink Bug	Insecta			
<i>Chortophaga viridifasciata</i>	Green-striped Grasshopper	Insecta			

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<i>Chrysis sp.</i>		Insecta			
<i>Chrysochus auratus</i>	Dogbane Leaf Beetle	Insecta			
<i>Chrysolina flavomarginata</i>		Insecta			
<i>Chrysopa nigricornis</i>	Black-horned Green Lacewing	Insecta			
<i>Chrysopa oculata</i>	Golden-eyed lacewing	Insecta			
<i>Chrysoteuchia topiarius</i>	Topiary Grass-veneer	Insecta			
<i>Cicindela sp.</i>		Insecta			
<i>Cicindela duodecimguttata</i>	Twelve-spotted Tiger Beetle	Insecta			
<i>Cicindela punctulata</i>	Punctured Tiger Beetle	Insecta			
<i>Cicindela purpurea</i>	Purple Tiger Beetle	Insecta			
<i>Cicindela repanda</i>	Bronzed Tiger Beetle	Insecta			
<i>Cicindela scutellaris</i>	Festive Tiger Beetle	Insecta			
<i>Cicindela scutellaris scutellaris</i>	Festive Tiger Beetle	Insecta			
<i>Cicindela tranquebarica</i>	Oblique-lined Tiger Beetle	Insecta			
<i>Clepsia clemensiana</i>	Clemens' Clepsia Moth	Insecta			
<i>Clogmia albipunctata</i>	Bathroom Moth Fly	Insecta			
<i>Coccinella novemnotata</i>	Nine-spotted Lady Beetle	Insecta			

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<i>Coccinella septempunctata</i>	Seven-spotted Lady Beetle	Insecta			
<i>Coccinella transversoguttata</i>	Transverse Lady Beetle	Insecta			
<i>Coelioxys</i> sp.	Sharptail Bees	Insecta			
<i>Coelotanypus concinnus</i>	N/A	Insecta			
<i>Coenus delius</i>	N/A	Insecta			
<i>Coleomegilla maculata</i>	Spotted Pink Lady Beetle	Insecta			
<i>Colias eurytheme</i>	Orange Sulphur	Insecta			
<i>Colias philodice</i>	Clouded Sulphur	Insecta			
<i>Colladonus belli</i>	N/A	Insecta			
<i>Collops bipunctatus</i>	N/A	Insecta			
<i>Colpa pollenifera</i>	N/A	Insecta			
<i>Condyllostylus caudatus</i>	N/A	Insecta			
<i>Conocephalus fasciatus</i>	Slender Meadow Katydid	Insecta			
<i>Crangonyx floridanus</i>	N/A	Crustacea			
<i>Crioceris duodecimpunctata</i>	Spotted Asparagus Beetle	Insecta			
<i>Crossidius pulchellus</i>	Beautiful Long-horned Beetle	Insecta			
<i>Cucujus puniceus</i>	N/A	Insecta			
<i>Cucullia dorsalis</i>	N/A	Insecta			

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<i>Cuerna alpina</i>	N/A	Insecta			
<i>Cuerna costalis</i>	Lateral-lined Sharpshooter	Insecta			
<i>Cuerna striata</i>	Striped Leafhopper	Insecta			
<i>Cuterebra lepusculi</i>	N/A	Insecta			
<i>Cyclosa turbinata</i>	Humped Trashline Orbweaver	Arachnida			
<i>Cydia pomonella</i>	Codling Moth	Insecta			
<i>Cyphocleonus achates</i>	Knapweed Root Weevil	Insecta			
<i>Danaus gilippus</i>	N/A	Insecta			
<i>Danaus plexippus</i>	Monarch	Insecta			
<i>Dargida diffusa</i>	Wheat Head Armyworm	Insecta			
<i>Decantha tistra</i>	N/A	Insecta			
<i>Deloyala guttata</i>	Mottled Tortoise Beetle	Insecta			
<i>Delphinia picta</i>	Common Picture-winged Fly	Insecta			
<i>Dermacentor variabilis</i>	American Dog Tick	Arachnida			
<i>Dermestes lardarius</i>	Larder Beetle	Insecta			
<i>Dermestes undulatus</i>	N/A	Insecta			
<i>Diabrotica cristata</i>	Black Diabrotica	Insecta			
<i>Diabrotica undecimpunctata</i>	Spotted Cucumber Beetle	Insecta			

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<i>Diabrotica virgifera</i>	Western Corn Rootworm	Insecta			
<i>Dinothenarus badipes</i>	N/A	Insecta			
<i>Dione vanillae</i>	Gulf Fritillary	Insecta			
<i>Diplolepis ignota</i>	N/A	Insecta			
<i>Diplolepis rosae</i>	Mossy Rose Gall Wasp	Insecta			
<i>Disholcaspis quercusmamma</i>	Oak Rough Bulletgall Wasp	Insecta			
<i>Dissosteira carolina</i>	Carolina Grasshopper	Insecta			
<i>Dolichovespula</i>	Aerial Yellowjackets	Insecta			
<i>Dolichovespula arenaria</i>	Common Aerial Yellowjacket	Insecta			
<i>Dolichovespula maculata</i>	Bald-faced Hornet	Insecta			
<i>Dolomedes scriptus</i>	Striped Fishing Spider	Arachnida			
<i>Dysdera crocata</i>	Woodlouse Spider	Arachnida			
<i>Echinargus isola</i>	Reakirt's Blue	Insecta			
<i>Eleodes carbonaria</i>	N/A	Insecta			
<i>Eleodes carbonaria obsoleta</i>	N/A	Insecta			
<i>Eleodes hispilabris</i>	Rough-lipped Darkling Beetle	Insecta			
<i>Eleodes suturalis</i>	Red-backed Darkling Beetle	Insecta			

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<i>Embaphion muricatum</i>	N/A	Insecta			
<i>Embaphion planum</i>	N/A	Insecta			
<i>Emmelina monodactyla</i>	Morning-glory Plume Moth	Insecta			
<i>Enallagma carunculatum</i>	Tule Bluet	Insecta			
<i>Enallagma civile</i>	Familiar Bluet	Insecta			
<i>Enicospilus purgatus</i>	N/A	Insecta			
<i>Enoclerus cordifer</i>	N/A	Insecta			
<i>Enoclerus spinolae</i>	Handsome Yucca Beetle	Insecta			
<i>Entomobrya atrocincta</i>	Dimorphic Springtail	Hexapoda			
<i>Epargyreus clarus</i>	Silver-spotted Skipper	Insecta			
<i>Epicauta pensylvanica</i>	Black Blister Beetle	Insecta			
<i>Epimelissodes obliqua</i>	Oblique Longhorn bee	Insecta			
<i>Eratigena agrestis</i>	Hobo Spider	Arachnida			
<i>Eratigena atrica</i>	Giant House Spider Complex	Arachnida			
<i>Eriophyes cerasicrumena</i>	Black Cherry Leaf Gall Mite	Arachnida			
<i>Eriophyes tiliae</i>	Red Nail Gall Mite	Arachnida			
<i>Eristalis arbustorum</i>	Eurasian Drone Fly	Insecta			
<i>Eristalis stipator</i>	Yellow-shouldered Drone Fly	Insecta			

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<i>Eristalis tenax</i>	Common Drone Fly	Insecta			
<i>Eritettix simplex</i>	Velvet-striped Grasshopper	Insecta			
<i>Erythemis collocata</i>	Western Pondhawk	Insecta			
<i>Erythroneura elegans</i>	N/A	Insecta			
<i>Estigmene sp.</i>	Ermine Moths	Insecta			
<i>Estigmene acrea</i>	Salt Marsh Moth	Insecta			
<i>Eumenes sp.</i>	Typical Potter Wasps	Insecta			
<i>Eumorphia achemon</i>	Achemon Sphinx	Insecta			
<i>Eupeodes volucris</i>	Large-tailed Aphideater	Insecta			
<i>Euphoria inda</i>	Bumble Flower Beetle	Insecta			
<i>Euphoria kernii</i>	Kern's Flower Scarab	Insecta			
<i>Euptoieta claudia</i>	Variegated Fritillary	Insecta			
<i>Euura proxima</i>	Willow Redgall Sawfly	Insecta			
<i>Euxoa auxiliaris</i>	Army Cutworm Moth	Insecta			
<i>Exitianus exitiosus</i>	Gray Lawn Leafhopper	Insecta			
<i>Exochomus aethiops</i>	Ebony Shield Lady Beetle	Insecta			
<i>Fallceon quilleri</i>	N/A	Insecta			
<i>Faxonius sp.</i>	N/A	Crustacea			

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<i>Faxonius immunis</i>	Calico Crayfish	Crustacea			
<i>Faxonius virilis</i>	Virile Crayfish	Crustacea			
<i>Feltia herilis</i>	Master's Dart	Insecta			
<i>Feltia jaculifera</i>	Dingy Cutworm Moth	Insecta			
<i>Fieberiella florii</i>	Privet Leafhopper	Insecta			
<i>Forficula auricularia</i>	European Earwig Complex	Insecta			
<i>Galasa nigrinodis</i>	Boxwood Leaf-tier Moth	Insecta			
<i>Gastrophysa cyanea</i>	Blue Dock Beetle	Insecta			
<i>Geolycosa missouriensis</i>	Missouri Burrowing Wolf Spider	Arachnida			
<i>Geolycosa wrighti</i>	Black-bellied Burrowing Wolf Spider	Arachnida			
<i>Gerris sp.</i>	Water Striders	Insecta			
<i>Glischrochilus quadrisignatus</i>	Four-spotted Sap Beetle	Insecta			
<i>Graphocephala lugubris</i>	N/A	Insecta			
<i>Grotea lokii</i>	N/A	Insecta			
<i>Gryllus pennsylvanicus</i>	Fall Field Cricket	Insecta			
<i>Gryllus veletis</i>	Spring Field Cricket	Insecta			
<i>Gyponana octolineata</i>	Eight-lined Leafhopper	Insecta			
<i>Hadrotettix trifasciatus</i>	Three-banded	Insecta			

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	Grasshopper				
<i>Haematopsis grataria</i>	Chickweed Geometer Moth	Insecta			
<i>Halictus ligatus</i>	Ligated Furrow Bee	Insecta			
<i>Halictus rubicundus</i>	Orange-legged Furrow Bee	Insecta			
<i>Halyomorpha halys</i>	Brown Marmorated Stink Bug	Insecta			
<i>Harmonia axyridis</i>	Asian Lady Beetle	Insecta			
<i>Harpalus amputatus</i>	N/A	Insecta			
<i>Harrisina metallica</i>	Western Grapeleaf Skeletonizer Moth	Insecta			
<i>Hecatera dysodea</i>	Small Ranunculus	Insecta			
<i>Helicoverpa zea</i>	Corn Earworm Moth	Insecta			
<i>Helophilus fasciatus</i>	Narrow-headed Marsh Fly	Insecta			
<i>Helophilus latifrons</i>	Broad-headed Marsh Fly	Insecta			
<i>Hemaris diffinis</i>	Snowberry Clearwing	Insecta			
<i>Herpyllus ecclesiasticus</i>	Eastern Parson Spider	Arachnida			
<i>Hetaerina americana</i>	American Rubyspot	Insecta			
<i>Heterosilpha ramosa</i>	Garden Carrion Beetle	Insecta			
<i>Hippodamia convergens</i>	Convergent Lady Beetle	Insecta			
<i>Hippodamia parenthesis</i>	Parenthesis Lady Beetle	Insecta			

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<i>Hogna carolinensis</i>	Carolina Wolf Spider	Arachnida			
<i>Homoglaea carbonaria</i>	N/A	Insecta			
<i>Hoplitis fulgida fulgida</i>	N/A	Insecta			
<i>Hylaeus leptocephalus</i>	Slender-faced Masked Bee	Insecta			
<i>Hyles lineata</i>	White-lined Sphinx	Insecta			
<i>Hypera postica</i>	Alfalfa Weevil	Insecta			
<i>Hypsopygia costalis</i>	Clover Hayworm Moth	Insecta			
<i>Ichneumon ambulatorius</i>	N/A	Insecta			
<i>Idaea demissaria</i>	Red-bordered Wave	Insecta			
<i>Idaea dimidiata</i>	Single-dotted Wave	Insecta			
<i>Idia aemula</i>	Common Idia Moth	Insecta			
<i>Ischnura damula</i>	Plains Forktail	Insecta			
<i>Ischnura verticalis</i>	Eastern Forktail	Insecta			
<i>Jadera haematoloma</i>	Red-shouldered Bug	Insecta			
<i>Japananus hyalinus</i>	Japanese Maple Leafhopper	Insecta			
<i>Jonthonota nigripes</i>	Blacklegged Tortoise Beetle	Insecta			
<i>Lampria bicolor</i>	N/A	Insecta			
<i>Larinus carlinae</i>	Canada Thistle Bud Weevil	Insecta			

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<i>Larinus minutus</i>	Lesser Knapweed Flower Weevil	Insecta			
<i>Larinus obtusus</i>	Blunt Knapweed Flower Weevil	Insecta			
<i>Latrodectus hesperus</i>	Western Black Widow	Arachnida			
<i>Lebia bivittata</i>	N/A	Insecta			
<i>Leptoglossus clypealis</i>	Western Leaf-footed Bug	Insecta			
<i>Leptoglossus occidentalis</i>	Western Conifer Seed Bug	Insecta			
<i>Leptomantispa pulchella</i>	Beautiful Mantidfly	Insecta			
<i>Lestes congener</i>	Spotted Spreadwing	Insecta			
<i>Lestes dryas</i>	Emerald Spreadwing	Insecta			
<i>Leucania commoides</i>	Two-lined Wainscot	Insecta			
<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Insecta			
<i>Libellula luctuosa</i>	Widow Skimmer	Insecta			
<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Insecta			
<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Insecta			
<i>Libytheana carinenta</i>	American Snout	Insecta			
<i>Limenitis archippus</i>	Viceroy	Insecta			
<i>Limenitis weidemeyerii</i>	Weidemeyer's Admiral	Insecta			
<i>Limnporus notabilis</i>	N/A	Insecta			

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<i>Lithobius forficatus</i>	Brown Centipede	Myriapoda			
<i>Lobocleta peralbata</i>	Speckled Wave	Insecta			
<i>Lon taxiles</i>	Taxiles Skipper	Insecta			
<i>Loxostege cereralis</i>	Alfalfa Webworm Moth	Insecta			
<i>Lucilia sericata</i>	Common European Greenbottle Fly	Insecta			
<i>Lygaeus kalmii</i>	Small Milkweed Bug	Insecta			
<i>Lygaeus kalmii kalmii</i>	Western Small Milkweed Bug	Insecta			
<i>Lygus lineolaris</i>	North American Tarnished Plant Bug	Insecta			
<i>Malachius aeneus</i>	Scarlet Malachite Beetle	Insecta			
<i>Mallota bautias</i>	Bare-eyed Mimic Fly	Insecta			
<i>Manduca quinquemaculatus</i>	Five-spotted Hawk Moth	Insecta			
<i>Manduca sexta</i>	Carolina Sphinx	Insecta			
<i>Mantis religiosa</i>	European Mantis	Insecta			
<i>Mecinus janthiniformis</i>	Dalmatian toadflax stem weevil	Insecta			
<i>Megachile sp.</i>	Leafcutter, Mortar, and Resin Bees	Insecta			
<i>Megachile montivaga</i>	Silver-tailed Petalcutter	Insecta			
<i>Megachile parallela</i>	N/A	Insecta			

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<i>Megachile perihirta</i>	Western Leafcutter Bee	Insecta			
<i>Megacyllene robiniae</i>	Locust Borer	Insecta			
<i>Megalonotus sabulicola</i>	Introduced Dirt-colored Seed Bug	Insecta			
<i>Megarhyssa macrurus</i>	Long-tailed Giant Ichneumonid Wasp	Insecta			
<i>Megatibicen dealbatus</i>	Plains Cicada	Insecta			
<i>Melanolestes picipes</i>	Black Corsair	Insecta			
<i>Melanoplus bivittatus</i>	Two-striped Grasshopper	Insecta			
<i>Melanoplus differentialis</i>	Differential Grasshopper	Insecta			
<i>Melanoplus femurrubrum</i>	Red-legged Grasshopper	Insecta			
<i>Melanoplus keeleri</i>	Keeler's Spur-throat Grasshopper	Insecta			
<i>Melanoplus lakinus</i>	Lakin Grasshopper	Insecta			
<i>Melanoplus occidentalis</i>	Flabellate Grasshopper	Insecta			
<i>Melissodes sp.</i>	N/A	Insecta			
<i>Melissodes bimaculatus</i>	Two-spotted Longhorn Bee	Insecta			
<i>Merodon equestris</i>	Narcissus Bulb Fly	Insecta			
<i>Metanema inatomaria</i>	Pale Metanema Moth	Insecta			
<i>Metator pardalinus</i>	Pard Grasshopper	Insecta			

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<i>Microcentrum rhombifolium</i>	Greater Anglewing	Insecta			
<i>Microvelia</i> sp.	N/A	Insecta			
<i>Micrutalis calva</i>	Honeylocust Treehopper	Insecta			
<i>Mischocyttarus flavitarsis</i>	Western Paper Wasp	Insecta			
<i>Mompha eloisella</i>	Red-streaked Mompha Moth	Insecta			
<i>Musca autumnalis</i>	Face fly	Insecta			
<i>Myrmeleon</i> sp.	Antlions	Insecta			
<i>Mythimna unipuncta</i>	Armyworm Moth	Insecta			
<i>Nabis americanoferus</i>	Common Damsel Bug	Insecta			
<i>Nathalis iole</i>	Dainty Sulphur	Insecta			
<i>Neoclytus acuminatus</i>	Red-headed Ash Borer	Insecta			
<i>Neoclytus caprea</i>	Banded Ash Borer	Insecta			
<i>Neoneides muticus</i>	N/A	Insecta			
<i>Neoscona crucifera</i>	Spotted Orbweaver	Arachnida			
<i>Neotephritis finalis</i>	Sunflower Seed Maggot	Insecta			
<i>Neottiglossa sulcifrons</i>	N/A	Insecta			
<i>Nephelodes minians</i>	Bronzed Cutworm Moth	Insecta			
<i>Nicrophorus tomentosus</i>	Tomentose Burying Beetle	Insecta			

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<i>Noctua pronuba</i>	Large Yellow Underwing	Insecta			
<i>Nomada sp.</i>	Nomad Bees	Insecta			
<i>Norvellina chenopodii</i>	N/A	Insecta			
<i>Norvellina scitula</i>	N/A	Insecta			
<i>Nymphalis antiopa</i>	Mourning Cloak	Insecta			
<i>Ochlodes sylvanoides</i>	Woodland Skipper	Insecta			
<i>Oecanthus rileyi</i>	Riley's Tree Cricket	Insecta			
<i>Oncopeltus fasciatus</i>	Large Milkweed Bug	Insecta			
<i>Onthophagus orpheus</i>	Green-bronze Dung Beetle	Insecta			
<i>Ophiogomphus severus</i>	Pale Snaketail	Insecta			
<i>Ophraella americana</i>	American Goldenrod Leaf Beetle	Insecta			
<i>Orchesella cincta</i>	N/A	Hexapoda			
<i>Otiorhynchus cribricollis</i>	Cribrate Weevil	Insecta			
<i>Otiorhynchus ovatus</i>	Strawberry Root Weevil	Insecta			
<i>Otiorhynchus rugosostriatus</i>	Rough strawberry root weevil	Insecta			
<i>Pachydiplax longipennis</i>	Blue Dasher	Insecta			
<i>Pachypsylla celtidismamma</i>	Hackberry Nipplegall Psyllid	Insecta			

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<i>Pachysphinx occidentalis</i>	Western Poplar Sphinx	Insecta			
<i>Paonias excaecata</i>	Blinded Sphinx	Insecta			
<i>Papilio multicaudata</i>	Two-tailed Swallowtail	Insecta			
<i>Papilio polyxenes</i>	Black Swallowtail	Insecta			
<i>Papilio polyxenes asterius</i>	Eastern Black Swallowtail	Insecta			
<i>Papilio rutulus</i>	Western Tiger Swallowtail	Insecta			
<i>Pardalophora apiculata</i>	Coral-winged Grasshopper	Insecta			
<i>Paropomala wyomingensis</i>	Wyoming Toothpick Grasshopper	Insecta			
<i>Pelecinus polyturator</i>	American Pelecinid Wasp	Insecta			
<i>Pelegrina galathea</i>	Peppered Jumping Spider	Arachnida			
<i>Pelochrista scintillana</i>	Spangled Pelochrista	Insecta			
<i>Perillus bioculatus</i>	Two-spotted Stink Bug	Insecta			
<i>Perillus exaptus</i>	N/A	Insecta			
<i>Perithemis tenera</i>	Eastern Amberwing	Insecta			
<i>Phalangium opilio</i>	European Harvestman	Arachnida			
<i>Phanogomphus militaris</i>	Sulphur-tipped Clubtail	Insecta			
<i>Phidippus apacheanus</i>	Apache Jumping Spider	Arachnida			
<i>Phidippus audax</i>	Bold Jumping Spider	Arachnida			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Phidippus octopunctatus</i>	N/A	Arachnida			
<i>Phidippus pus</i>	N/A	Arachnida			
<i>Phigalia titea</i>	Half-wing Moth	Insecta			
<i>Pholcus phalangioides</i>	Long-bodied Cellar Spider	Arachnida			
<i>Phyciodes pulchella</i>	Field Crescent	Insecta			
<i>Phyllophaga lanceolata</i>	Lanceolated Chafer	Insecta			
<i>Phymata americana</i>	Jagged Ambush Bug	Insecta			
<i>Pieris rapae</i>	Cabbage White	Insecta			
<i>Pigritia murtfeldtella</i>	N/A	Insecta			
<i>Piruna pirus</i>	Russet Skipperling	Insecta			
<i>Plathemis lydia</i>	Common Whitetail	Insecta			
<i>Platycryptus californicus</i>	California Flattened Jumping Spider	Arachnida			
<i>Plodia interpunctella</i>	Indian-Meal Moth	Insecta			
<i>Plutella xylostella</i>	Diamondback Moth	Insecta			
<i>Pogonomyrmex occidentalis</i>	Western Harvester Ant	Insecta			
<i>Polistes aurifer</i>	Golden Paper Wasp	Insecta			
<i>Polistes dominula</i>	European Paper Wasp	Insecta			
<i>Polites peckius</i>	Peck's Skipper	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Polydrusus impressifrons</i>	N/A	Insecta			
<i>Polygonia satyrus</i>	Satyr Comma	Insecta			
<i>Polyphylla decemlineata</i>	Ten-lined June Beetle	Insecta			
<i>Pontia protodice</i>	Checkered White	Insecta			
<i>Popillia japonica</i>	Japanese Beetle	Insecta			
<i>Prionus californicus</i>	California Root Borer	Insecta			
<i>Psyllobora vigintimaculata</i>	Twenty-spotted Lady Beetle	Insecta			
<i>Pyralis farinalis</i>	Meal moth	Insecta			
<i>Pyropyga nigricans</i>	Dark Firefly	Insecta			
<i>Pyrrharctia isabella</i>	Isabella Tiger Moth	Insecta			
<i>Rabdophaga strobiloides</i>	Willow Pinecone Gall Midge	Insecta			
<i>Reduvius personatus</i>	Masked Hunter	Insecta			
<i>Reesa vespulae</i>	Undertaker Carpet Beetle	Insecta			
<i>Rhagovelia sp.</i>	Broad-shouldered water striders	Insecta			
<i>Rhaxonycha carolina</i>	Carolina Cantharid	Insecta			
<i>Rhinocyllus conicus</i>	Nodding Thistle Receptacle Weevil	Insecta			
<i>Rhionaeschna multicolor</i>	Blue-eyed Darner	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Rhopalapion longirostre</i>	Hollyhock Weevil	Insecta			
<i>Sassacus vitis</i>	Buttonhook Leafbeetle	Arachnida			
	Jumping Spider				
<i>Saucrobotys futilalis</i>	Dogbane Saucrobotys Moth	Insecta			
<i>Sceliphron caementarium</i>	Yellow-legged Mud-dauber Wasp	Insecta			
<i>Schinia jaguarina</i>	Jaguar Flower Moth	Insecta			
<i>Schinia mortua</i>	N/A	Insecta			
<i>Scyphophorus acupunctatus</i>	Sisal Weevil	Insecta			
<i>Sitochroa chortalis</i>	Dimorphic Sitochroa Moth	Insecta			
<i>Sitona hispidulus</i>	Clover Weevil	Insecta			
<i>Sminthurinus elegans</i>	N/A	Hexapoda			
<i>Solenopsis sp.</i>	Solenopsis Fire Ants and Thief Ants	Insecta			
<i>Sosipatra rileyella</i>	N/A	Insecta			
<i>Spharagemon equale</i>	Say's Grasshopper	Insecta			
<i>Sphenophorus cicatristriatus</i>	Rocky Mountain Billbug	Insecta			
<i>Sphenophorus parvulus</i>	Bluegrass Billbug	Insecta			
<i>Sphex ichneumoneus</i>	Great Golden Digger Wasp	Insecta			
<i>Sphragisticus nebulosus</i>	N/A	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Spilosoma virginica</i>	Virginian Tiger Moth	Insecta			
<i>Spodoptera ornithogalli</i>	Yellow-striped Armyworm Moth	Insecta			
<i>Steatoda triangulosa</i>	Triangulate Combfoot	Arachnida			
<i>Stenolophus lecontei</i>	LeConte's Seedcorn Beetle	Insecta			
<i>Stenomorpha opaca</i>	N/A	Insecta			
<i>Stenotus binotatus</i>	Two-spotted Grass Bug	Insecta			
<i>Stomoxys calcitrans</i>	Stable Fly	Insecta			
<i>Strymon melinus</i>	Gray Hairstreak	Insecta			
<i>Subcoccinella vigintiquatuorpunctata</i>	Alfalfa Lady Beetle	Insecta			
<i>Sympetrum corruptum</i>	Variegated Meadowhawk	Insecta			
<i>Sympetrum danae</i>	Black Meadowhawk	Insecta			
<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Insecta			
<i>Sympetrum madidum</i>	Red-veined Meadowhawk	Insecta	Tracked	G5	S2
<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Insecta			
<i>Sympetrum pallipes</i>	Striped Meadowhawk	Insecta			
<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Insecta			
<i>Sympetrum vicinum</i>	Autumn Meadowhawk	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Synanthedon exitiosa</i>	Peachtree Borer Moth	Insecta			
<i>Syrirta pipiens</i>	Common Compost Fly	Insecta			
<i>Tabanus punctifer</i>	Western Black Horse Fly	Insecta			
<i>Talavera minuta</i>	Minute Jumping Spider	Arachnida			
<i>Tapinoma sessile</i>	Odorous House Ant	Insecta			
<i>Tegenaria domestica</i>	Barn Funnel Weaver	Arachnida			
<i>Tetramorium immigrans</i>	Immigrant Pavement Ant	Insecta			
<i>Tetraopes annulatus</i>	Ringed Long-horned Beetle	Insecta			
<i>Tetraopes femoratus</i>	Red-femured Milkweed Borer	Insecta			
<i>Thanatophilus lapponicus</i>	Common Carrion Beetle	Insecta			
<i>Tharsalea helloides</i>	Purplish Copper	Insecta			
<i>Thecabius populimonilis</i>	Bead-like Cottonwood Gall aphid	Insecta			
<i>Thyanta custator accerra</i>	N/A	Insecta			
<i>Tibellus oblongus</i>	Oblong Running Spider	Arachnida			
<i>Tigrosa grandis</i>	N/A	Arachnida			
<i>Tigrosa helluo</i>	Wetland Giant Wolf Spider	Arachnida			
<i>Timulla vagans</i>	N/A	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Toxomerus marginatus</i>	Margined Calligrapher	Insecta			
<i>Trachyrhachys kiowa</i>	Kiowa Grasshopper	Insecta			
<i>Tramea lacerata</i>	Black Saddlebags	Insecta			
<i>Tramea onusta</i>	Red Saddlebags	Insecta			
<i>Tremex columba</i>	Pigeon Horntail	Insecta			
<i>Trichodes nuttalli</i>	Red-blue Checkered Beetle	Insecta			
<i>Trichosirocalus horridus</i>	Thistle Crown Weevil	Insecta			
<i>Trirhabda nitidicollis</i>	Rabbitbrush Beetle	Insecta			
<i>Trochosa sp.</i>	Wolf spiders	Arachnida			
<i>Tyta luctuosa</i>	Four-spotted Moth	Insecta			
<i>Ulolonche orbiculata</i>	Orbiculate Quaker	Insecta			
<i>Urophora affinis</i>	Knapweed Gall Fly	Insecta			
<i>Urophora cardui</i>	Thistle Stem Gall Fly	Insecta			
<i>Vanessa sp.</i>	Ladies and Related Admirals	Insecta			
<i>Vanessa atalanta</i>	Red Admiral	Insecta			
<i>Vanessa cardui</i>	Painted Lady	Insecta			
<i>Vespula pensylvanica</i>	Western Yellowjacket	Insecta			
<i>Virbia aurantiaca</i>	Orange Virbia Moth	Insecta			

Table 7: Arthropod species observed in Louisville, Colorado and their class, if they are CNHP tracked, and their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Class	CNHP Tracked Status	Global Rarity Rank	State Rarity Rank
<i>Willowsia nigromaculata</i>	N/A	Hexapoda			
<i>Wohlfahrtia vigil</i>	N/A	Insecta			
<i>Xanthippus corallipes</i>	Red-shanked Grasshopper	Insecta			
<i>Xanthogaleruca luteola</i>	Elm Leaf Beetle	Insecta			
<i>Xenoglossa pruinosa</i>	Pruinose Squash Bee	Insecta			
<i>Yersiniops solitarius</i>	Horned Ground Mantis	Insecta			
<i>Zelus luridus</i>	Pale Green Assassin Bug	Insecta			

Appendix E. Animal Species in Louisville, CO

Table 8: Animal species observations taken in the City of Louisville Open Space parcels with observation dates, location, and coordinates.						
Class	Observation Date	Location	Latitude	Longitude	Scientific Name	Common Name
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583421	-105.736004	<i>Sturnella neglecta</i>	Western Meadowlark
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583421	-105.736004	<i>Troglodytes aedon</i>	Northern House Wren
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583421	-105.736004	<i>Agelaius phoeniceus</i>	Red-winged Blackbird
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583421	-105.736004	<i>Turdus migratorius</i>	American Robin
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583421	-105.736004	<i>Poecile atricapillus</i>	Black-capped Chickadee
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583421	-105.736004	<i>Haemorhous mexicanus</i>	House Finch
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583246	-105.732853	<i>Melospiza melodia</i>	Song Sparrow
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583147	-105.73538	<i>Setophaga petechia</i>	Yellow Warbler
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583147	-105.73538	<i>Selasphorus platycercus</i>	Broad-tailed Hummingbird
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583077	-105.737595	<i>Zenaida macroura</i>	Mourning Dove
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583021	-105.738665	<i>Sturnus vulgaris</i>	European Starling
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583021	-105.738665	<i>Colaptes auratus</i>	Northern Flicker
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583021	-105.738665	<i>Quiscalus quiscula</i>	Common Grackle

Table 8: Animal species observations taken in the City of Louisville Open Space parcels with observation dates, location, and coordinates.						
Class	Observation Date	Location	Latitude	Longitude	Scientific Name	Common Name
Aves	6/9/2025	CTC Open Space - off Empire Road	39.583021	-105.738665	Anas platyrhynchos	Mallard
Aves	6/9/2025	CTC Open Space - off Empire Road	39.582989	-105.739292	Riparia riparia	Bank Swallow
Mammalia	6/10/2025	CTC Open Space - off Empire Road	39.583084	-105.736595	Peromyscus sonoriensis	Western Deer Mouse
Aves	6/11/2025	CTC Open Space - off Empire Road	39.583089	-105.737619	Megaceryle alcyon	Belted Kingfisher
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Picoides pubescens	Downy Woodpecker
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Haemorhous mexicanus	House Finch
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Sturnella neglecta	Western Meadowlark
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Quiscalus quiscula	Common Grackle
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Sturnus vulgaris	European Starling
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Hirundo rustica	Barn Swallow
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Anas platyrhynchos	Mallard
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Sturnus vulgaris	Eurasian Collared-Dove
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Agelaius phoeniceus	Red-winged Blackbird
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Turdus migratorius	American Robin
Aves	6/9/2025	Dutch Creek Open Space	39.579328	-105.848233	Colaptes auratus	Northern Flicker
Aves	6/9/2025	Dutch Creek Open Space	39.578772	-105.840516	Mimus polyglottos	Northern Mockingbird

Table 8: Animal species observations taken in the City of Louisville Open Space parcels with observation dates, location, and coordinates.						
Class	Observation Date	Location	Latitude	Longitude	Scientific Name	Common Name
Aves	6/9/2025	Dutch Creek Open Space	39.578772	-105.840516	Troglodytes aedon	Northern House Wren
Aves	6/9/2025	Dutch Creek Open Space	39.578772	-105.840516	Passer domesticus	House Sparrow
Aves	6/9/2025	Dutch Creek Open Space	39.579296	-105.828518	Poecile atricapillus	Black-capped Chickadee
Aves	6/9/2025	Dutch Creek Open Space	39.578896	-105.822465	Cyanocitta cristata	Blue Jay
Aves	6/9/2025	CTC Corridor at Hwy 36	39.573309	-105.946201	Troglodytes aedon	Northern House Wren
Aves	6/9/2025	CTC Corridor at Hwy 36	39.573309	-105.946201	Quiscalus quiscula	Common Grackle
Aves	6/9/2025	CTC Corridor at Hwy 36	39.573309	-105.946201	Turdus migratorius	American Robin
Aves	6/9/2025	CTC Corridor at Hwy 36	39.573309	-105.946201	Poecile atricapillus	Black-capped Chickadee
Aves	6/9/2025	CTC Corridor at Hwy 36	39.573309	-105.946201	Cinclus mexicanus	American Dipper
Aves	6/9/2025	CTC Corridor at Hwy 36	39.573309	-105.946201	Spinus tristis	American Goldfinch
Malacostraca	6/9/2025	CTC Corridor at Hwy 36	39.573344	-105.946201	Faxonius virilis	Virile Crayfish
Aves	6/9/2025	Hecla Lake, Louisville, CO, US	39.991731	-105.122047	Ardea herodias	Great Blue Heron
Aves	6/9/2025	Hecla Lake, Louisville, CO, US	39.990985	-105.12135	Anas platyrhynchos	Mallard
Aves	6/9/2025	Hecla Lake, Louisville, CO, US	39.990985	-105.12135	Branta canadensis	Canada Goose
Aves	6/10/2025	Harper Lake, Louisville, CO, US	39.587169	-105.991193	Buteo jamaicensis	Red-tailed Hawk
Aves	6/10/2025	Harper Lake, Louisville, CO, US	39.587169	-105.991193	Branta canadensis	Canada Goose
Aves	6/10/2025	Harper Lake, Louisville, CO, US	39.587169	-105.991193	Charadrius vociferus	Killdeer

Table 8: Animal species observations taken in the City of Louisville Open Space parcels with observation dates, location, and coordinates.						
Class	Observation Date	Location	Latitude	Longitude	Scientific Name	Common Name
Aves	6/10/2025	Harper Lake, Louisville, CO, US	39.587169	-105.991193	<i>Sturnella neglecta</i>	Western Meadowlark
Aves	6/10/2025	Harper Lake, Louisville, CO, US	39.587169	-105.991193	<i>Turdus migratorius</i>	American Robin
Aves	6/10/2025	Harper Lake, Louisville, CO, US	39.587169	-105.991193	<i>Haemorhous mexicanus</i>	House Finch
Aves	6/10/2025	Davidson Mesa Open Space, Louisville, CO, US	39.587021	-105.999865	<i>Melospiza melodia</i>	Song Sparrow
Aves	6/10/2025	Davidson Mesa Open Space, Louisville, CO, US	39.587021	-105.999865	<i>Hirundo rustica</i>	Barn Swallow
Aves	6/10/2025	Davidson Mesa Open Space, Louisville, CO, US	39.586202	-105.10321	<i>Pica hudsonia</i>	Black-billed Magpie
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596484	-105.871615	<i>Picoides pubescens</i>	Downy Woodpecker
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596484	-105.871615	<i>Sturnella neglecta</i>	Western Meadowlark
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596484	-105.871615	<i>Turdus migratorius</i>	American Robin
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596484	-105.871615	<i>Colaptes auratus</i>	Northern Flicker
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596484	-105.871615	<i>Quiscalus quiscula</i>	Common Grackle
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596484	-105.871615	<i>Cyanocitta cristata</i>	Blue Jay
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596369	-105.865033	<i>Poecile atricapillus</i>	Black-capped Chickadee
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596369	-105.865033	<i>Sayornis saya</i>	Say's Phoebe
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596297	-105.869086	<i>Icteria virens</i>	Yellow-breasted Chat

Table 8: Animal species observations taken in the City of Louisville Open Space parcels with observation dates, location, and coordinates.						
Class	Observation Date	Location	Latitude	Longitude	Scientific Name	Common Name
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596297	-105.869086	Agelaius phoeniceus	Red-winged Blackbird
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596297	-105.869086	Zenaida macroura	Mourning Dove
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596106	-105.874987	Pipilo maculatus	Spotted Towhee
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596106	-105.874987	Troglodytes aedon	Northern House Wren
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596385	-105.877677	Anas platyrhynchos	Mallard
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596385	-105.877677	Molothrus ater	Brown-headed Cowbird
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.595765	-105.88693	Pica hudsonia	Black-billed Magpie
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596347	-105.902988	Buteo jamaicensis	Red-tailed Hawk
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596347	-105.902988	Selasphorus platycercus	Broad-tailed Hummingbird
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596347	-105.902988	Tachycineta bicolor	Tree Swallow
Aves	6/11/2025	North Open Space, Louisville, CO, US	39.596347	-105.902988	Cathartes aura	Turkey Vulture
Amphibia	6/11/2025	North Open Space, Louisville, CO, US	39.596211	-105.866218	Pseudacris maculata	Boreal Chorus Frog

Table 9: Animal species observed in Louisville, and whether they are CNHP tracked species of concern, their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Tracked	Global Rarity	State Rarity
<i>Ambystoma mavortium</i>	Western Tiger Salamander			
<i>Anaxyrus</i>	North American Toads			
<i>Anaxyrus woodhousii</i>	Woodhouse's Toad			
<i>Apalone spinifera</i>	Spiny Softshell			
<i>Canis latrans</i>	Coyote			
<i>Castor canadensis</i>	American Beaver			
<i>Cervus canadensis</i>	Elk			
<i>Cervus canadensis canadensis</i>	American Elk			
<i>Chelydra serpentina</i>	Common Snapping Turtle			
<i>Chrysemys picta</i>	Painted Turtle			
<i>Chrysemys picta bellii</i>	Western Painted Turtle			
<i>Coluber constrictor</i>	North American Racer			
<i>Coluber constrictor flaviventris</i>	Eastern Yellow-bellied Racer			
<i>Crotalus viridis</i>	Prairie Rattlesnake			
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	Tracked	G4	S3
<i>Cynomys ludovicianus ludovicianus</i>	N/A			

Table 9: Animal species observed in Louisville, and whether they are CNHP tracked species of concern, their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Tracked	Global Rarity	State Rarity
<i>Deirochelyinae</i>	Deirochelyine Turtles			
<i>Eptesicus fuscus</i>	Big Brown Bat			
<i>Felis catus</i>	Domestic Cat			
<i>Graptemys ouachitensis</i>	Ouachita Map Turtle			
<i>Lasionycteris noctivagans</i>	Silver-haired Bat	Watchlist	G5	S4
<i>Lasiurus cinereus</i>	Hoary Bat	Watchlist	G5	S4
<i>Lithobates catesbeianus</i>	American Bullfrog			
<i>Lynx rufus</i>	Bobcat			
<i>Mephitis mephitis</i>	Striped Skunk			
<i>Microtus drummondii</i>	Western Meadow Vole			
<i>Mus musculus</i>	House Mouse			
<i>Neogale vison</i>	American Mink			
<i>Odocoileus hemionus</i>	Mule Deer			
<i>Odocoileus virginianus</i>	White-tailed Deer			
<i>Onatra zibethicus</i>	Muskrat			
<i>Peromyscus sonoriensis</i>	Western Deer Mouse			
<i>Pituophis catenifer sayi</i>	Bullsnake			
<i>Procyon lotor</i>	Common Raccoon			

Table 9: Animal species observed in Louisville, and whether they are CNHP tracked species of concern, their global and state rarity status. Rarity status is only given if tracked.

Scientific Name	Common Name	Tracked	Global Rarity	State Rarity
<i>Pseudacris maculata</i>	Boreal Chorus Frog			
<i>Sciurus niger</i>	Eastern Fox Squirrel			
<i>Sciurus niger rufiventer</i>	Western Fox Squirrel			
<i>Sylvilagus audubonii</i>	Desert Cottontail			
<i>Sylvilagus floridanus</i>	Eastern Cottontail			
<i>Sylvilagus nuttallii</i>	Mountain Cottontail			
<i>Thamnophis elegans vagrans</i>	Wandering Garter Snake			
<i>Thamnophis radix</i>	Plains Garter Snake			
<i>Thamnophis sirtalis parietalis</i>	Red-sided Garter Snake			
<i>Trachemys scripta</i>	Pond Slider			
<i>Trachemys scripta elegans</i>	Red-eared Slider			
<i>Ursus americanus</i>	American Black Bear			
<i>Vulpes vulpes</i>	Red Fox			

Appendix F. Fungi Species in Louisville, CO

Table 10: Fungi species found in Louisville, CO	
Scientific Name	Common Name
<i>Acarospora strigata</i>	Hoary Cobblestone Lichen
<i>Agaricus arvensis</i>	Horse Mushroom
<i>Agaricus bernardii</i>	Salt-loving Agaricus
<i>Agaricus bitorquis</i>	Pavement Mushroom
<i>Agaricus malangelus</i>	N/A
<i>Bolbitius titubans</i>	Yellow Fieldcap
<i>Calogaya decipiens</i>	Broken Yolks
<i>Candelariella rosulans</i>	Sagebrush Goldspeck Lichen
<i>Candelariella vitellina</i>	Common Goldspeck
<i>Cerioporus squamosus</i>	Dryad's Saddle
<i>Chlorophyllum molybdites</i>	Green-Spored Parasol
<i>Chlorophyllum rhacodes</i>	Shaggy Parasol
<i>Coprinellus micaceus</i>	Mica cap
<i>Coprinopsis atramentaria</i>	Common Ink Cap
<i>Coprinopsis nivea</i>	Snowy Inkcap
<i>Coprinus comatus</i>	Shaggy Mane
<i>Crucibulum laeve</i>	common bird's nest fungus
<i>Erysiphe convolvuli</i>	Bindweed Powdery Mildew
<i>Hohenbuehelia petaloides</i>	Shoehorn Oyster
<i>Leratiomyces percevalii</i>	Mulch Maids
<i>Mycosarcoma maydis</i>	Corn Smut
<i>Parasola plicatilis</i>	Pleated Inkcap
<i>Phallus sp.</i>	N/A
<i>Phallus hadriani</i>	Purple-egg Stinkhorn

<i>Phallus impudicus</i>	Common Stinkhorn
<i>Physcia stellaris</i>	Star Rosette Lichen
<i>Pleopsidium flavum</i>	Gold Cobblestone Lichen
<i>Pleurotus pulmonarius</i>	Pale Oyster
<i>Protoparmeliopsis garovaglii</i>	Sagebrush Rim-lichen
<i>Protoparmeliopsis muralis</i>	Stonewall Rim Lichen
<i>Puccinia suaveolens</i>	Thistle Rust
<i>Rusavskia elegans</i>	Elegant Sunburst Lichen
<i>Umbilicaria americana</i>	Frosted Rock Tripe
<i>Volvariella bombycina</i>	Silky Rosegill
<i>Xanthomendoza fallax</i>	Hooded Sunburst Lichen
<i>Xanthoparmelia cumberlandia</i>	Cumberland Rock Shield