

CITY OF BOULDER OPEN SPACE & MOUNTAIN PARKS
Prairie Dog Working Group
66 S. Cherryvale Road, Boulder, CO 80303
April 10, 2017
Meeting Summary

ATTENDANCE

Participants: Dan Brandemuehl, Kristin Cannon, Patrick Comer, Aaron Cook, Elle Cushman, Jeff Edson, Deborah Jones, Keri Konold, Lindsey Sterling Krank, Amber Largent, Amy Masching, Joy Master, Valerie Matheson, Andy Pelster, Carse Pustmueller, Eric Sims, Jr., Heather Swanson, John Vickery.

Facilitation: Heather Bergman, Sam Haas

ACTION ITEMS

Working Group members	Come prepared to discuss the criteria and consider the ideas presented during this meeting.
Lindsey	Ask permission and send the habitation quantification tool spreadsheet calculator to Heather Bergman.

PUBLIC COMMENT

As discussed by Working Group members during the first meeting, the opening ten minutes of the meeting were dedicated to both verbal and written public comment. There were no verbal or written public comments at this meeting.

INTEGRATED PEST MANAGEMENT PROCESS

Val Matheson, City of Boulder’s Urban Wildlife Conservation Coordinator, and Rella Abernathy, City of Boulder’s Integrated Pest Management Coordinator, offered to answer questions from Working Group members about the integrated pest management (IPM) process.

Clarifying Questions and Comments

Members of the Working Group asked clarifying questions and offered comments about the integrated pest management process. Questions and comments are indicated in italics.

Will Delta Dust insecticide only be used as a last resort for plague management?

Pesticides are only used as a last resort according to the City’s IPM policy. A pest is viewed within the context of the entire ecosystem, and if a threshold is reached, then non-chemical methods are evaluated to address the pest issue before chemicals are considered. When a pesticide, particularly an insecticide, is used on a broad scale, there must also be an ecological risk assessment that examines the impacts to non-target species and overall ecosystem health and function.

During the City Council Meeting on August 16, Council passed a resolution regarding bumblebees. Will this impact the use of Delta Dust for prairie dog management?

City Council passed a resolution to discontinue use of the neonicotinoid family of insecticide in order to protect pollinators and due to other environmental risks these insecticides pose. Delta Dust is in the pyrethroid family, not the neonicotinoids. It is a broad-spectrum insecticide.

Does Delta Dust have to be applied by a licensed commercial applicator?

Delta Dust is available over the counter, but you must have a license to apply it for hire. City staff could apply it as a public entity. In other cases where insects are controlled over a broad area, contractors are hired to apply the larvicide for mosquito control and the tree-injected product for the emerald ash borer program.

If the Working Group were to recommend the use of Delta Dust as part of the 2017 plan, would that be possible under the existing Boulder regulatory framework?

It would be possible and would not require a policy change, but if it were handled as similar issues in the past, like the emerald ash borer or mosquito control programs, it would require a management plan, public process, and City Council approval.

Would the use of Delta Dust be permitted on properties that are adjacent to organic or transitioning-to-organic properties?

The organic certification only applies to the specific property. It is unclear how buffering would work.

Does the use of Delta Dust or the plague vaccine raise any legal or ethical issues related to genetically modified organisms? (GMO's)

The SPV vaccine is different than genetically modified crops, around which the conversations of GMOs have centered. It is, however, a genetically recombinant vaccine (as most vaccines are). Due to the contentious nature of community conversations surrounding GMOs, the Working Group should be mindful that the vaccine is under an experimental licensing phase and any negative conversations surrounding its use could be detrimental to its long-term approval and use.

Some of the literature provided for Delta Dust cited the use of application techniques that are not considered effective for Boulder's prairie dog colonies, such as aerial broadcasting and the soaking of organisms. Boulder will only be placing Delta Dust in underground burrows at a low rate. The literature also cited cases that poorly administered Delta Dust and emphasized many of the costs of the use of Delta Dust but did not review the benefits.

The information provided was a list of studies pertaining to deltamethrin that were gathered within the last few weeks. It is not a completed ecological risk assessment. Like all pesticide studies, including tests used to register a pesticide, the information in any study may or may not be relevant to a particular situation. All risk assessments use the available data and literature to estimate the effects that pesticides could have in complex natural settings.

Pesticides are rated at levels of either “caution,” “warning,” or “danger.” Delta Dust is a “caution” level pesticide. City staff does not typically utilize what are called “restricted use” pesticides, but rather uses general-use pesticides that do not require a license to purchase. The City commits to using the least toxic pesticides when use is necessary. The majority of pesticides are banned on City properties and any product that is used must first be assessed and approved for use using stringent criteria. The mosquito management plan includes a threshold for pesticide use and there should be similar thresholds for Delta Dust use that will have to be met.

The Pesticide Applicators Act prohibits prairie dog relocators from applying Delta Dust as volunteers, because they still must get reimbursed for the materials. There was discussion about scenarios where this may not apply, but no concrete resolution.

If Delta Dust is not used to protect prairie dog colonies, the mountain plover population will decline and the landscape will not be suitable for the reintroduction of black-footed ferrets.

ADMINISTRATIVE RULE FOR THE RELOCATION OF PRAIRIE DOGS

Val Matheson informed the Working Group members that the City of Boulder is reexamining the Administrative Rule for the Relocation of Prairie Dogs, which was developed in 2002. It is not used anymore, but has never been repealed and has components that may still be viable. The Administrative Rule for the Relocation of Prairie Dogs is available [here](#).

WORKING GROUP RECOMMENDATIONS

The following Working Group members presented recommendations for prairie dog management in Boulder: Dan Brandemuehl, Pat Comer, Aaron Cook, Lindsey Sterling Krank, Amy Masching, Val Matheson, Joy Master, Andy Pelster, Carse Pustmueller, and Heather Swanson. The ideas fit into six buckets: Emergency, 2017 Relocation Pilot Projects, Policy, Research and Study, Process and Guidelines, and Plans.

Immediate

1. Get Council approval to use Delta Dust on the relocated Armory prairie dog burrows immediately. Without dusting, the Armory colony is in imminent danger.
2. Keep the Foothills Community Park recolonizing prairie dogs in place at Foothills Park if the burrows at the release site will not be dusted before relocation. Consider the use of barriers or other methods to keep the colony contained there.

2017 Relocation Pilot Projects

1. Require the use of Delta Dust in burrows on 2017 receiving sites that have been previously impacted by the plague.
2. Place a temporary moratorium on any relocation receiving sites until they have been dusted, or until there is agreement that the receiving site will be dusted.
3. Develop criteria for selecting relocation contractors. The contractors should be selected and contracted by the City. The contractor should be trusted by the public and should have extensive experience with and commitment to conservation (not extermination).

4. Install and maintain of visual barrier fences at relocation sites adjacent to privately owned and occupied land. Fences would address many landowner concerns, e.g. property devaluation, colony expansion, and potential for plague transmission to humans and pets.
5. Provide incentives for private landowners to offer their land as receiving sites. One incentive could be a deduction for property taxes. Look to Rabbit Mountain as an example.
6. Create a conservation/mitigation fund. Use the habitation quantification tool developed by the Prairie Dog Coalition as a model. Private landowner conservation fees would go into the fund and the fund could be used for acquisition of land for prairie dogs.
7. Evaluate opportunities for using grazing to enhance pest die-off and vegetation recovery during post-plague restoration on the Grassland Preserves. Strategically graze to control weedy vegetation, and remove grazing during specific periods to allow native vegetation to have a competitive edge. Use custom grazing plans for each site that consider the site conditions, weather, and climatic conditions. This could speed up the recovery of vegetation and thus the availability of relocation sites.
8. Continue to evaluate new or different relocation methods (e.g. boring vs. auguring) to increase success and/or reduce impacts of relocation.
9. Evaluate sites that have had plague in the past, identify open burrows that could be used in the future, and act to keep burrows open.
10. Consider options that would allow use of Prairie Dog Conservation Areas (PCAs) as relocation sites. Identify funding for barriers. Move a smaller number of prairie dogs to multiple PCAs (rather than many to one) after reaching out to neighbors for ideas.
11. Define successful relocation. Data should be continually collected on colonies post-relocation to measure for plague.
12. Consider the cumulative impacts of relocation on the grasslands. Design best management practices that minimize impacts to native grassland communities (e.g. machinery, access, infrastructure).
13. Reevaluate current relocation methods to ensure most successful practices are utilized. Look at methods to minimize disturbance such as increased weed removal (with regard to the IPM policy), seeding, equipment cleaning, etc.

Relocation Pilot Projects to Implement Starting in 2018 or Future Years

1. Introduce a landowner fund/savings account for prairie dog relocation that private landowners could pay into if they want to move their prairie dogs. Ideally, this fund could act as a placeholder for landowners who are planning to develop.
2. Follow the guidelines of conservation conflict transformation. Identify all stakeholders involved in prairie dog relocations. Recognize the history that each group brings to the table that will impact the success of the solution and could contribute to the conflict's intractability.
3. Provide equal, fair, and continuous opportunities for stakeholder engagement and dedicate resources to long-term public engagement and relationship maintenance.

4. Consider the substance, process, and relationships necessary for successful processes. Recognize that conflict is an opportunity. The goal should not be to eliminate conflict.
5. Create a revegetation plan and exclusion plan with a budget that can be quickly implemented after die-off, movement, or other changes in occupation on removal and transition areas that are being used for agriculture. This will decrease the City's relocation and mitigation needs and increase agricultural land with minimal prairie dog conflict.
6. Create criteria for the prioritization of removal sites.

Policy

1. Develop a grassland banking system with the vision of connecting high-quality grassland habitats. The banking would provide credit for prior Open Space and Mountain Parks' investments in grasslands habitat. It would prioritize new city, county, and federal acquisitions and easements to consolidate grassland parcels. It would advance Open Space Mountain Parks cropland goals on private farmland in the County by moving these to fragmented areas and not contiguous grassland areas. It would match public and private funds to cover stewardship and implementation.
2. Revise the Wildlife Protection Ordinance number 7321, particularly 6-1-12 (Damaging Prairie Dog Burrows Prohibited), and 6-1-36 (Procedures for Obtaining Prairie Dog Lethal Control Permits).
3. Create a relocation policy that prioritizes colonies that are in imminent threat of lethal control, regardless of land ownership.
4. As part of the impact analysis, outline zones of grassland areas where Delta Dust should or should not be used on receiving sites based on presence of sensitive species or resources.
5. Use the collected conservation fund money to purchase additional City land for prairie dog habitat.

Research and Study

1. Measure vaccine and insecticide effectiveness. Collaboratively develop a research proposal to pilot a vaccine trial.
2. Conduct controlled experiments with zoning, treatment combinations, and treatment methods.
3. Use baseline and effectiveness monitoring for prairie dog colonies, other sensitive species, and public perception.
4. Conduct a study on the impact of Delta Dust on the insect population.
5. Update the field surveys for at-risk butterflies, moths, and other species that are vulnerable to Delta Dust.
6. Continue to work with partner agencies such as Boulder County Parks and Open Space, Colorado Parks and Wildlife, and the U.S. Fish and Wildlife Service to evaluate feasibility, desirability, and management implications of black-footed ferret reintroduction to the Southern Grasslands. The City has not yet gone through an evaluation process.

Process and Guidelines

1. Define sustainability as it relates to prairie dog management. Sustainability should include healthy and efficient connected grassland habitat (approximately 10,000 contiguous acres), disease resistant colonies, prairie dog populations regulated by native predators, and minimal conflict with people or other Open Space and Mountain Parks' values.
2. Follow the three-pronged approach developed by the Prairie Dog Coalition when evaluating receiving sites. First, identify whether there are prairie dogs on the land already. If there are no prairie dogs, follow the suitability criteria. Second, consider doing vegetation treatments on the site to revegetate and introduce native plants in the area. Third, determine the best approach for maintaining healthy prairie dog populations on the site and consider strategic use of Delta Dust.
3. Focus conservation efforts on developing at least 1,500 acres of contiguous habitat on the Southern Grasslands.
4. Review the Administrative Rule for the Relocation of Prairie Dogs to see what could be transferred to future recommendations.
5. Reevaluate ways to make agriculture land use and prairie dog habitat compatible by altering practices or by swapping lands/uses.

Plans

1. Create a Plague Management Plan in collaboration with Colorado Parks and Wildlife and U.S. Fish and Wildlife Service. The plague management plan should not advocate for blanket use of Delta Dust and should include thresholds that integrate science, regulations, integrated pest management policies, the health of the overall ecosystem, and the potential for black-footed ferret reintroduction. The plan should allow for varying thresholds based upon the local, state, and federal status of the black-tailed prairie dog.
2. Consider whether the goal of the plague management plan should be eliminating the rollercoaster nature of plague endemics in prairie dog populations. When defining best practices for sustainability and the complexities of the ecosystem, evaluate the implications of plague management and whether the rollercoaster is inherently negative.
3. Identify a system-wide minimum threshold number for prairie dog population occupation that includes consideration of commensal species. If the number of prairie dogs drops below the threshold, use Delta Dust. For example, if the objective is to reintroduce the black-footed ferret, the minimum threshold for prairie dog occupancy may be set between 80-90% for an area; but the overall system threshold could be much lower.
4. Review and revise the Grassland Management Plan. Consider the zones (north, south, central) as separate areas with different criteria. If prairie dogs are gone from one area, the ecosystem in that area is affected and, for the Southern Grasslands, this could limit the possibility of black-footed ferret reintroduction.
5. Ensure that all land marked as receiving sites in the Grassland Management Plan meet the Colorado Parks and Wildlife criteria.
6. Survey private property landowners on an annual basis to determine their short-, mid-, and long-term plans and intentions for prairie dog management. 2012 was the most recent private land survey.

7. Create more transparent guidelines for both the process of prioritizing relocation sites and for sharing City relocation priorities with the community. Every year, Boulder City staff should present the list of priorities for prairie dog relocations to the city Manager who will present it to City Council for approval.
8. Revise the receiving site criteria to allow for more flexibility and adaptive management. Collect baseline data before a relocation and conduct a six- to twelve-month reviews after a relocation. Create scientifically-based estimates for the permitted density of prairie dogs on relocation sites and ensure that receiving site criteria includes a requirement to provide adequate accommodation for the number of prairie dogs that will be located to the site. Develop criteria for identifying removal areas, with the goal of decreasing the acreage of removal areas. This will include a discussion of the use of other methods and the balance between prairie dog habitat and agricultural uses.
9. Form a group to investigate ways to create additional receiving sites is to increase the occupancy range, which is currently set at 10-26% or do away with that and use a system of acreage of population instead.
10. Revisit the vegetation options for receiving sites.
11. Ensure that all criteria for removal and transition sites reflect multiple-use objectives. On irrigated sites, consider using passive methods like blocking off burrows or using barriers. Reevaluate the agriculture sites based on the potential of passive methods. This could shorten the list of removal sites.
12. Consider an exemption to the burrow protection ordinance on sites that have confirmed plague.

NEXT STEPS

- At the next meeting, the Working Group will discuss the ideas that were presented.
- Keri Konold will send the Working Group the links to the presentations from the second meeting.
- Working Group members will reconsider and finalize the evaluation criteria.