

Translocation

A Briefing for Developers in Gunnison Prairie Dog Habitat

Gunnison's prairie dog, an iconic keystone species of the Southwest, plays a critical role in maintaining the health of grassland ecosystems in the region. Pressures from disease, hunting, recreational shooting and habitat loss have decreased populations by more than 95% over the last century. Now declared the *Species of Greatest Conservation Need* in all four states in its current range, the Gunnison's prairie dog needs your help to survive.

Flagstaff was built in prime Gunnison's prairie dog habitat.

Remnants of the once expansive colonies occupy fragments of their original home. Many live in narrow easements and strips of green space, others on undeveloped parcels of private and public land.

Habitat Harmony helps developers move Gunnison's prairie dog colonies from construction sites in and around the city to areas where development is not a risk.

We are a nonprofit 501(c)(3) corporation based in Flagstaff. Our goal is to help people live in harmony with wildlife and we have over 14 years of experience in the emerging field of applied conservation biology including translocation—the transport and release of animals from one site to another. We were the first to successfully translocate a prairie dog colony in Arizona. Our teams have worked on diverse projects, translocating over 1,700 prairie dogs to date. Our clients include the City of Flagstaff, APS and several private developers.

Translocation is not the first choice for dealing with prairie dogs. The best choice is that they remain in their colony and co-exist with development. Depending on the situation, non-lethal controls, such as strategic plantings, can be used to keep prairie dogs from expanding their colony. However, there are times when these approaches are not an option. It is only then that Habitat Harmony recommends translocation.

Relying on teams of volunteers led by a professional conservation biologist allows us to work cost effectively, ensuring the welfare of the prairie dogs during translocation so that they may reestablish a healthy colony at a new site. All of our translocation volunteers are required to attend a training session enabling us to achieve better results for the animals and the client.

We ideally work with clients early in their planning process to allow bundling translocation costs into site preparation budgets. Cost depends on the size and spatial extent of the colony, among other factors, so we divide our services in two phases: a low-cost colony inventory phase during which we develop a proposal for the translocation phase. This allows our clients to get to know us with low financial risk and manage their investment in distinct decision steps.



Why Translocate?

Flagstaff loves wildlife, and doing the right thing generates goodwill and positive press.

We work with clients to develop media releases and post signs on properties to show the community that the developer cares for wildlife—a stark contrast to bulldozing a site without any effort to save a known colony, burying hundreds of living animals.

Translocating prairie dogs shows the community that you care about what Flagstaff values.

For maps and more details, see Flagstaff Regional Plan 2030 Place Matters, Considerations for Development. <http://www.flagstaff.az.gov/DocumentCenter/View/44617>

Translocation: *transport and release of animals from one location to another.*

Not all species are adapted to translocation, but prairie dogs have been shown to survive the process. Phase I, the colony inventory and planning phase, is best implemented in spring. We first map the site to estimate the number and location of prairie dogs. At that time, holes are dusted for fleas to prevent the spread of disease and we search for a suitable abandoned site as a new home for the colony. We then prepare a budget for phase II, the capture and release phase. We use two humane methods of capture, sometimes in combination.

At the end of each capture period, traps are collected and prairie dogs are shaded and loaded into vehicles bound for the translocation site where they are released and monitored to ensure success.

Trapping uses baited collapsible metal traps left at the burrow entrance. Traps are first left open so that the prairie dogs get used to going in and out of them. After about a week, traps are set before dawn. The team watches from a distance until the time is right to collect the traps. This is repeated as necessary.

Sudsing uses sudsy water to flush out prairie dogs from their holes where they are captured by volunteers, towel dried, and held in family groups in animal kennels. This method is useful in narrow strips or high-traffic areas and as a final step if trapping is not working well in a colony.

Timing

Gunnison's prairie dogs hibernate from mid-September through mid-March to late April. When they emerge from hibernation in the spring, they mate, but only for a few hours on just one day. About a month later, they give birth and nurse young underground until the pups first emerge above ground in mid-June to early July.

This makes the optimal timing of translocation early July to the end of August to allow time for rehabilitation before their hibernation begins. Ideally construction would follow translocation within a few weeks. But in situations with longer gaps, temporary barriers can be erected to prevent prairie dogs from re-entering the development site before construction begins.

It is safe to assume that any prairie dogs left on site will die when construction begins—either crushed or suffocated to death by site grading or lost to heat stress or predation if left above ground without access to their burrows. Efforts made by our clients to prevent further loss of prairie dogs in the region have been viewed very favorably by the community.

The Gunnison's prairie dog

is one of five species of highly social, colonial, burrowing ground squirrels. Prairie dogs are a keystone species—a species essential within an ecosystem that when removed, changes the ecosystem drastically.

Up to several hundred individuals can live in one colony. Burrows provide shelter for other species like burrowing owls. Their burrowing and feeding habits keep prairie grasses healthy for other grazing animals. They help rainwater infiltrate deeply into the soil. They also are an important food source for many animals including hawks, snakes and the endangered black-footed ferret.

Gunnison's prairie dogs communicate through physical contact, like cuddling and kissing, and complex vocalizations. Former NAU researcher Con Slobodchikoff discovered that Gunnison's prairie dogs have

'... the most sophisticated animal language system that has been described to date.'

Please contact us to learn more about how we can help.

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