



Utah Conservation Corps & National Park Service Craters of the Moon Wildlife-Friendly Fencing Project

*9/26/2023-10/3/2023
10/10/2023-10/18/2023*

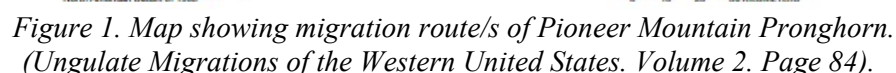


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Partner: Todd Stefanic - Wildlife Biologist, NPS - Southern Idaho Parks (not pictured)

Craters of the Moon National Monument and Preserve (CRMO) protects a valuable landscape and ecosystem unique in North America for its sheer size and recreational access. The monument is a sought-after tourist destination, providing recreational opportunities for hundreds of thousands of visitors annually. The vast patchwork of volcanic lava fields and islands of forest and intact sagebrush community also provides critical habitat for a variety of native plant and animal species.

Between 2009 and 2017 CRMO utilized The Utah Conservation Corps to convert approximately 8.2 miles of boundary fence to wildlife-friendly standards. (See Wildlife Friendly Fence Project Final Report 2009-2017). This effort was undertaken following the discovery of a pronghorn migration corridor from summer grounds north of Carey to winter grounds in the Birch Creek / Howe area (Figure 1). This pronghorn migration route crosses over 8 miles of rugged CRMO lava fields (figure 2). This project is phase 2 of that effort.



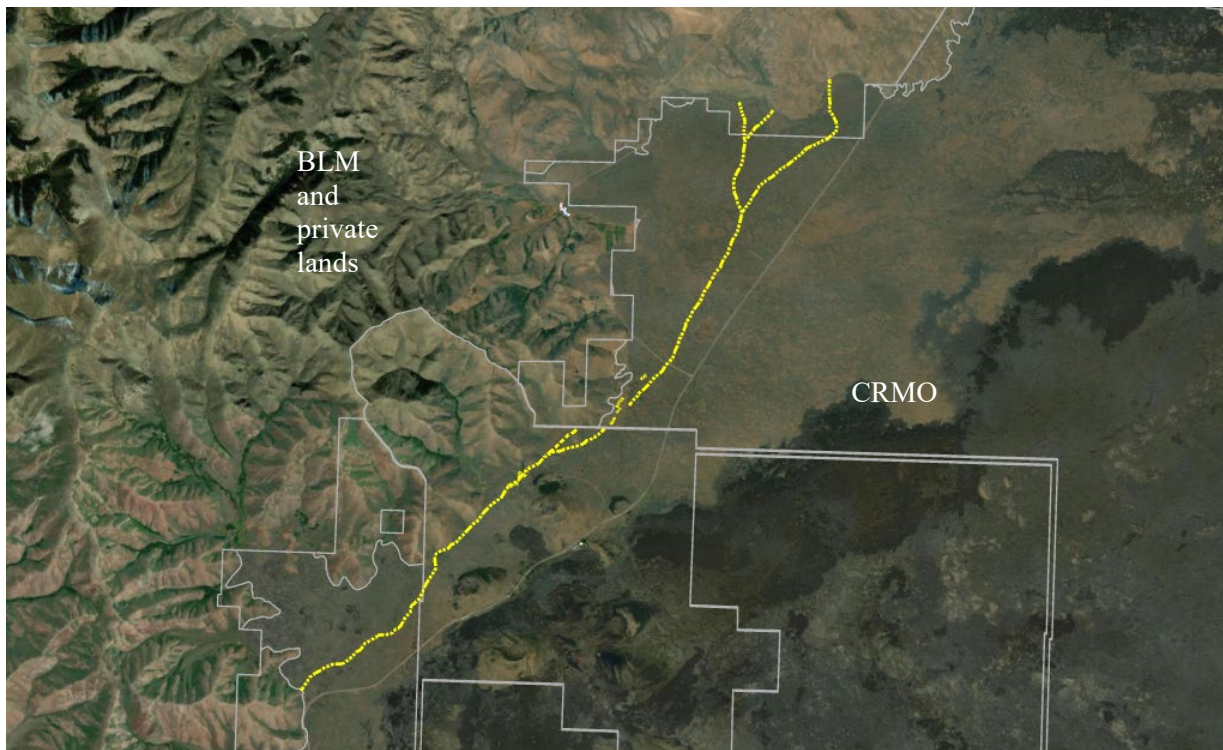


Figure 2. Map showing the pronghorn migration path over CRMO lava fields.

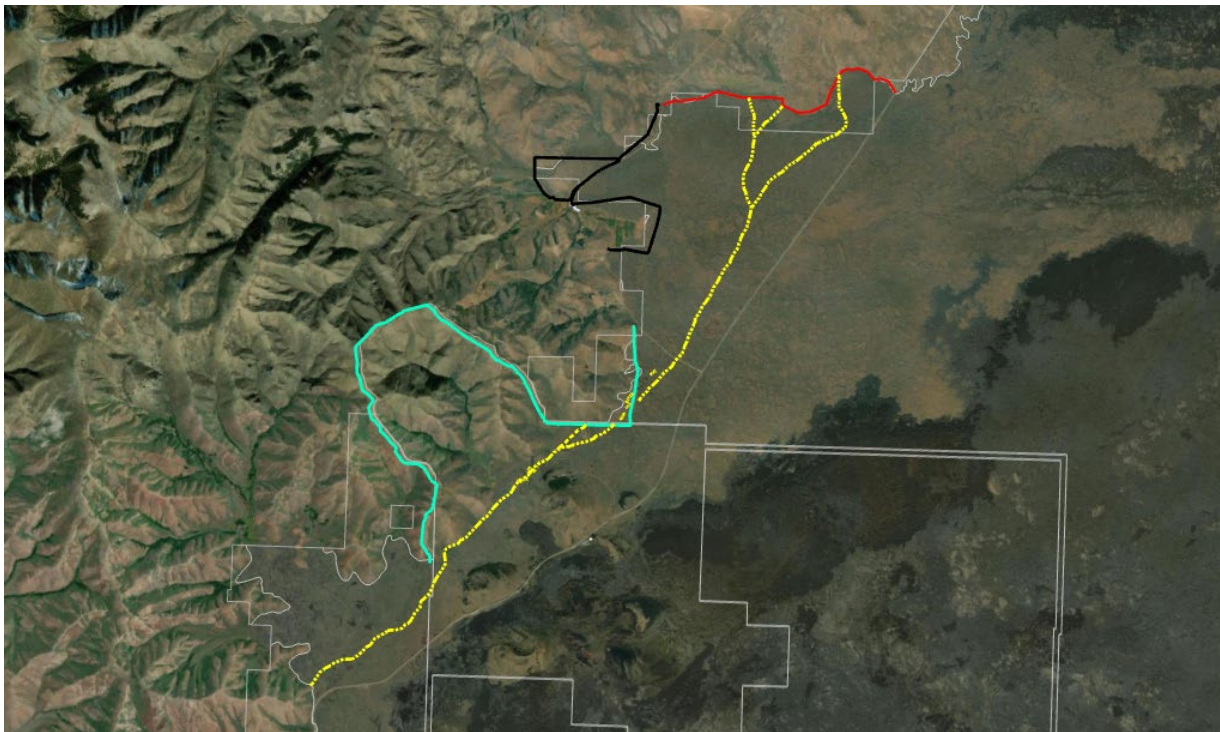


Figure 3. Pronghorn path (yellow) through CRMO, 2009-2017 fence project (teal), fence made wildlife-friendly with this project (red) and yet-to-be addressed old barbwire fences (black).

Following the completion of efforts in 2017, CRMO staff turned their attention to CRMO fencelines further northeast along the pronghorn migration corridor (figure 3 & 4). A project was put into PMIS and then the CRMO Wildlife Biologist went to work developing partnerships with the NRCS, IDFG and local landowners to address the complicated issues of this fenceline which rarely actually follows the CRMO boundary (for obvious reasons). This fenceline mostly follows the edge of the lava rather than the NPS-landowner boundary because this is where it is much easier to build fence and adjacent landowners don't want their cattle wandering on to the lava anyway.

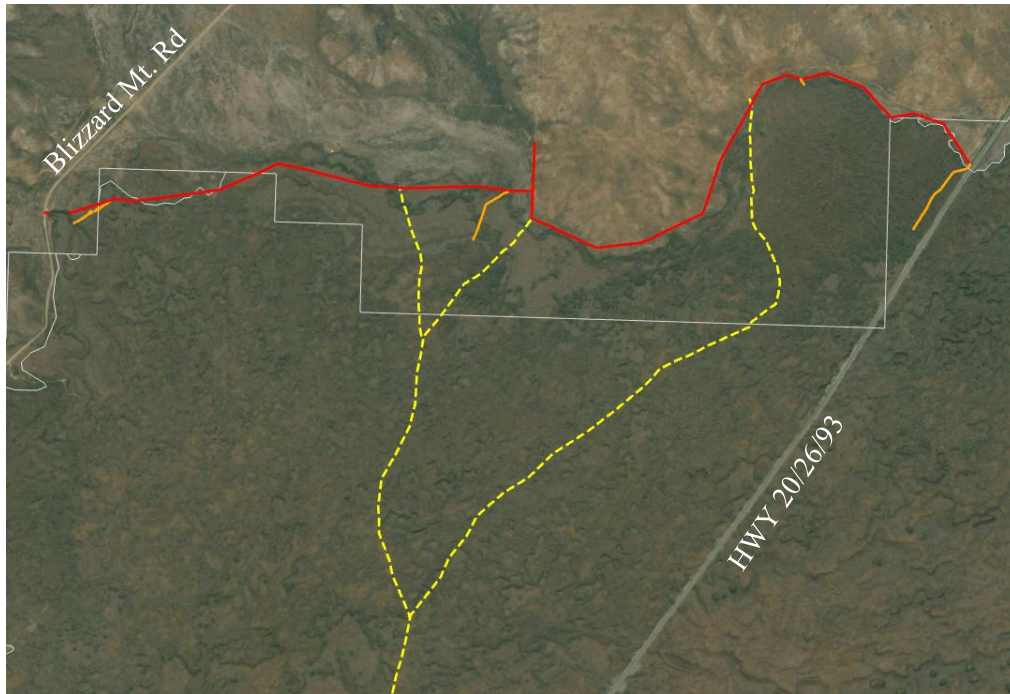


Figure 4. The area of focus in 2023. An approximately 2.6 mile-section of fence targeted for replacement to wildlife-friendly standards (red), approximately 0.37 miles of fences to be removed (orange).

Goals

Goals of the project were to make all of the CRMO boundary fences from HWY 20/26/93 to Blizzard Mountain Road (Figure 4) wildlife-friendly along with removal of any unneeded old spur fences in that area.

Methods

Fence design was loosely based on the design found in “A Landowner’s Guide to Wildlife Friendly Fences” (2008) (figure 5). This fence design was modified slightly by using smaller fence markers (alternating white and onyx ~3” strips of vinyl siding trim placed 3 feet apart) (Figure 6). Also, our design did not include a smooth top wire. This decision was made so that the top wire could be well marked for sage grouse without the markers sliding down to the nearest t-post with the wind. This was felt to be more important than a smooth top wire as the area is very good sage grouse habitat and went very close to a known lek. In addition, some sections of fence were originally only 3-strands and adjacent landowners wanted two strands of barbwire on these fences.

The ideal wildlife friendly fence

should (1) allow relatively free passage for animals to jump over and crawl under, and (2) be highly visible for both ungulates and birds. You can combine or tailor many of the ideas presented here for your specific situation.

Fences should be low enough for adult animals to jump, preferably 40" or less, and the top two wires should be no less than 12" apart. Deer and elk easily tangle their back legs if the top wires are closer together. The bottom wire or rail should be high enough for pronghorn, calves and fawns to crawl under, at least 18" from the ground. Increasing visibility using a top rail, high-visibility wire, flagging or other visual markers can help ungulates and birds, such as hawks, owls and swans, better navigate fences.

Wildlife Friendly Ideal

Wildlife friendly fences should be low enough for adult animals to jump, high enough for animals to crawl under, and minimize the chance of tangling. Montana Fish, Wildlife and Parks (FWP) recommends:

- A top wire or rail preferably no more than 40" above the ground, and absolutely no more than 42";
- At least 12" between the top two wires;
- At least 18" between the bottom wire or rail and the ground;
- Smooth wire or rail for the top, smooth wire on bottom.
- No vertical stays;
- Posts at 16.5-foot intervals;
- Gates, drop-downs, or other passages where wildlife concentrate and cross.

Using smooth wire – barbless wire, high-visibility tape or braid, or high-tensile electric wire – for the top and bottom strands will prevent snagging and injuries. In wildlife migration areas, drop-down fence, lay-down fence or crossings can be used for seasonal wildlife passage.

IDEAL WILDLIFE FRIENDLY FENCE

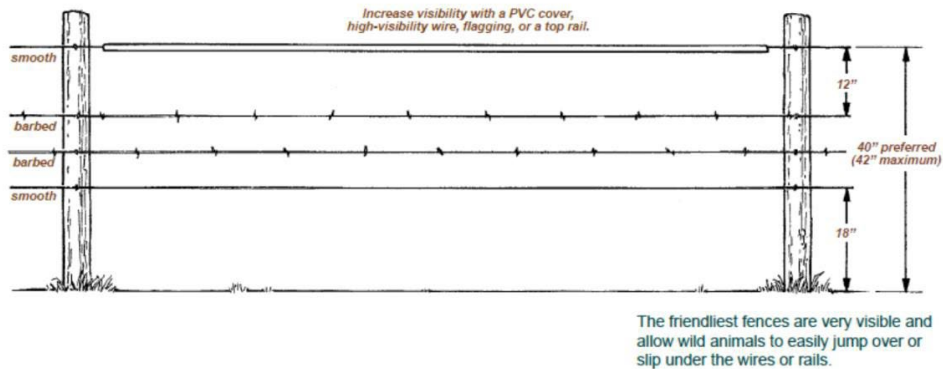


Figure 5. Page 8 from *A Landowners Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind* (Paige 2008).

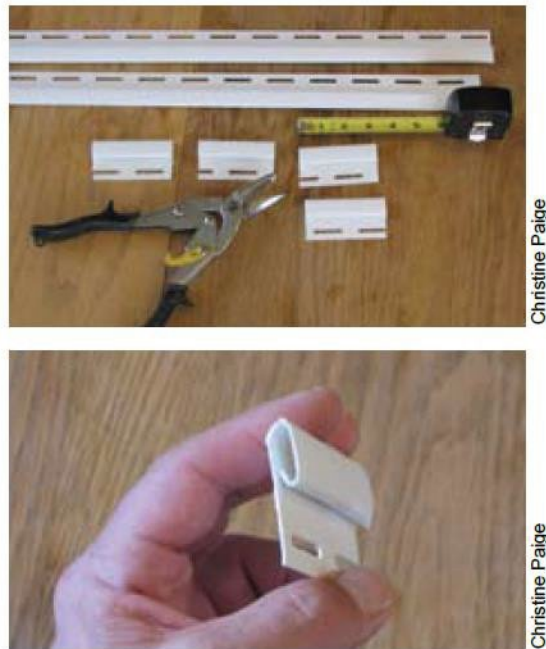


Figure 6. Vinyl siding fence marker.

Summary

The Utah Conservation Corps (UCC) completed 2 double hitches (8 days each) with Craters of the Moon. Crews worked alongside CRMO staff, Idaho Fish & Game staff and volunteers to complete approximately the first mile of the project. The remainder of the project was completed only by UCC and CRMO staff.

Bad weather and worse than expected fence condition made the going quite a bit slower than hoped. Weather conditions completely rained out 2 days of work. In the end about 2.5 miles of fence was converted to wildlife-friendly standards, falling only .13 miles short of the goal of reaching Blizzard Mountain Road. Another 0.39 miles of defunct spur fences were removed.

Crews were extremely appreciative of the time and effort Todd Stefanic put into training, teaching, and working alongside them, as well as the stellar accommodations at the yurt. Crews also expressed great appreciation for the landscape and ecology of Craters of the Moon and several individuals have decided to pursue employment with the National Park Service as a result.

Photos



UCC members Wade Lyn, Amanda Voth, Megan Bench, and Autumn Donehoo leave the worksite located near Goodale's Cutoff (a section of the Oregon trail) north of CRMO (10/2/23).



Crew leader Q Koelliker installs t-post with Todd Stefanic (left), member Megan Bench coils old barbed wire. (right), 9/29/23.



(Left) Rock crib constructed when t-post could not be pounded into ground. Crew used the rock crib to stretch wire over the lava rock; (right) Megan Bench and Amanda Voth clip and nail in new smooth wire (9/29/23).



(Left) Member Kody Kitchener tying off a wire to a rock crib after stretching it (43.534551, -113.529980). (Right) Section of nearly finished fence leading to a rock crib (43.534861, -113.531903).



Kody Kitchener (left and right) installing a rock hang that brings down the fence height to the proper eighteen inches (43.534591, -113.526592).



Before (left) and after (right) photographs of old fence removed and replaced with new wires and t-posts (9/30/23; 43.5337, -113.5208).

References

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Paige, C. 2008. A Landowner's Guide to Wildlife Friendly Fences. Landowner/ Wildlife Resource Program, Montana Fish, Wildlife and Parks, Helena, MT. 44 pp.

Stefanic, Todd C., 2017. Wildlife Friendly Fence Project Final Report 2009-2017. CRMO, Resource Management Division. <https://irma.nps.gov/DataStore/Reference/Profile/2247802>