

Managing Pocket Gophers: Protecting Agriculture and Engaging Youth

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Photo: M. Heaton

Abstract

Pocket gophers (*Thomomys bottae*) present a significant challenge for farmers and landowners in Garfield County, Utah. Their tunneling activity leads to economic losses through reduced crop yields, equipment damage, and costly pest control efforts (Baldwin et al., 2016). Garfield County Extension implemented a youth gopher trapping program, modeled after successful initiatives in neighboring counties. This program aimed to educate youth on safe and effective trapping techniques, distinguishing gopher mounds from those of protected species, and the importance of land stewardship. Additionally, it provided financial incentives, particularly for youth under 14 who lack traditional employment opportunities, while fostering outdoor engagement. The program yielded substantial results: 79 youth trapped 1,721 gophers and 141 squirrels, collectively earning \$14,156. Agricultural producers benefited from



Figure 1: Pocket gophers cause damage that increases production costs for farmers.

an estimated \$81,928 in savings from reduced abatement costs and crop damage. Participants spent 955 hours outdoors, reinforcing hands-on conservation learning while reducing screen time. By integrating pest management with youth education and financial incentives, the program effectively reduced gopher populations, provided income for young participants, and strengthened relationships between the county, conservation districts, and youth.

Objectives

- Reduce gopher and squirrel populations that damage agricultural and residential land, providing tangible proof of removal through collected specimens.
- Educate youth on identifying the differences between pocket gopher (*T. bottae*) mounds and those of the Utah prairie dog (*Cynomys parvidens*), a federally protected species, to prevent unintended harm to endangered wildlife.
- Teach youth essential trapping skills, including proper trap setup, safety precautions, landowner permission requirements, and ethical handling and disposal of rodents, fostering responsible pest control.
- Offer youth, particularly those under 14 who are not yet eligible for traditional employment, an opportunity to earn money while learning valuable skills in land stewardship.
- Strengthen partnerships between county officials, conservation districts, Extension, and local youth by promoting hands-on conservation efforts that encourage outdoor engagement and reduce excessive screen time (Figure 2).

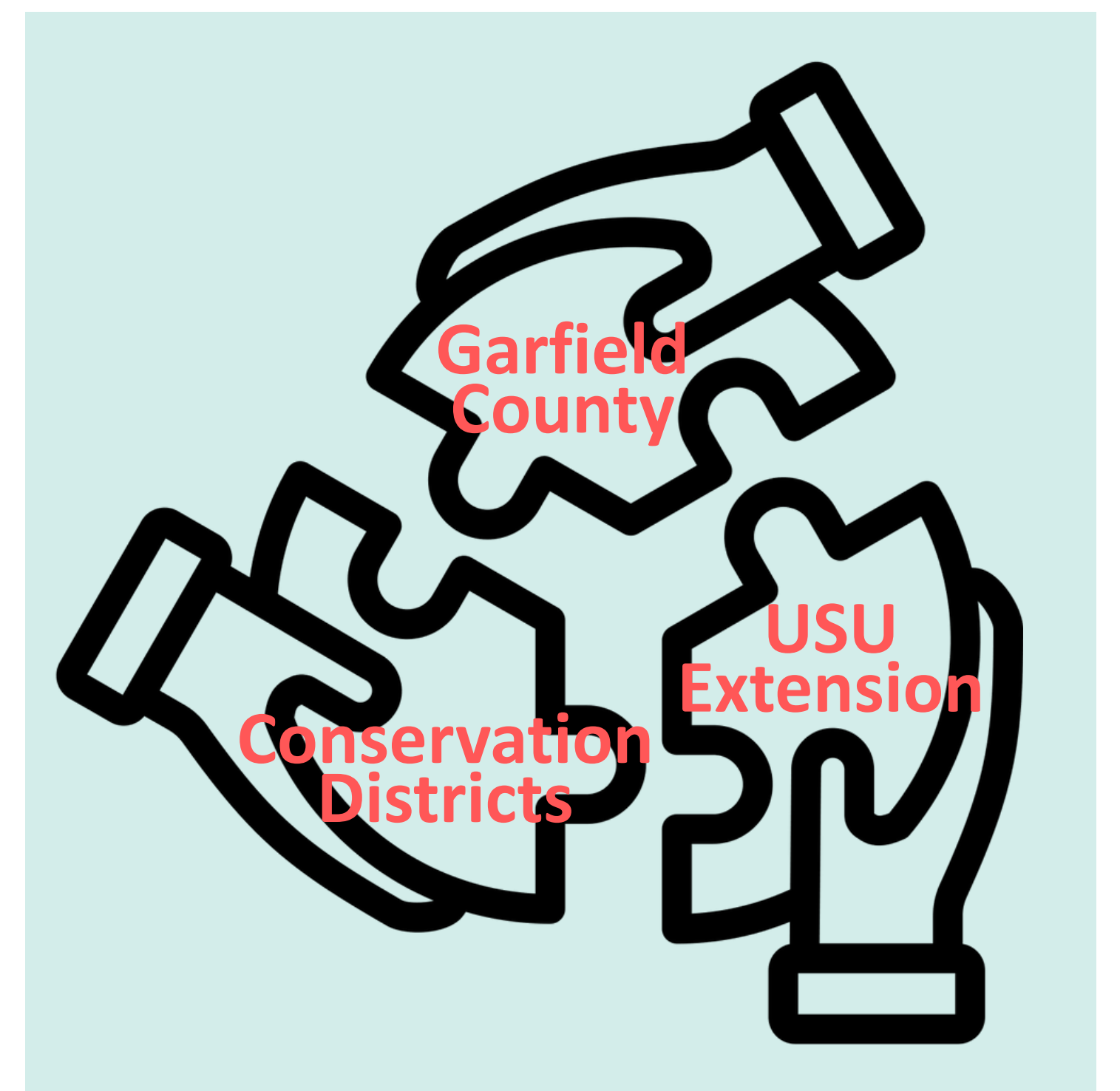


Figure 2: A collaborative effort among participating entities will reduce damage from burrowing rodents while empowering youth

Methods

With financial support from Upper Sevier Conservation District, Canyonlands Conservation District, and Garfield County, Garfield County Extension designed this program to equip youth with the skills and resources needed for effective gopher management. The program follows these steps:

- Extension conducts two educational workshops where youth (ages 18 and under) learn to identify trapping locations and properly set traps (Figure 3). Each participant receives five traps provided by conservation districts (Figure 4).
- Youth work with landowners to trap gophers or squirrels (Figure 5).
- Trapped rodents' tails are submitted to the Extension office for record-keeping (Figure 6).
- Extension tracks participant details, including address, age, and trapping locations.
- Conservation districts pay \$3 per tail, with Garfield County matching the amount.
- Garfield County issues payments to youth, with no limit on the number of tails submitted.
- Participants must be county residents and trap exclusively within Garfield County.
- While adults may assist younger children, youth must actively participate in trapping.



Figure 3: Extension teaches youth to trap through workshops held on each side of the county

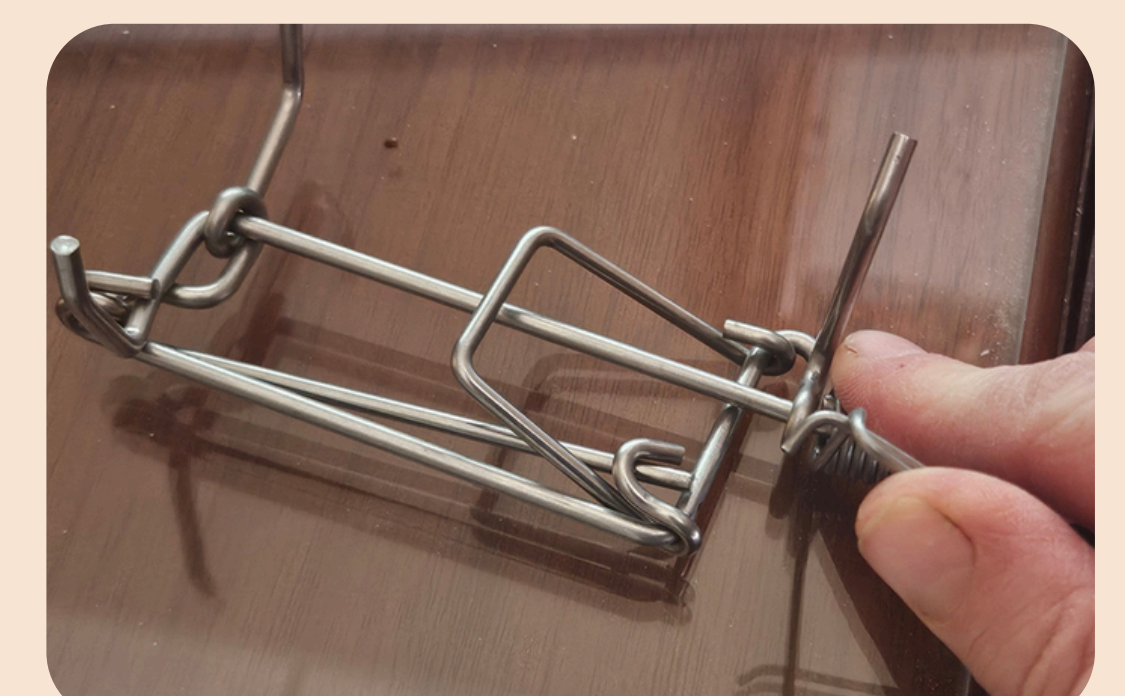


Figure 4: Conservation districts provide five traps for each workshop participant



Figure 5: Youth contact landowners for permission and trap gophers or squirrels



Figure 6: Youth turn in gopher or squirrel tails for \$6 each

All photos: M. Heaton

Conclusions

- 58% of the 34 youth who attended education events trapped gophers or squirrels.
- 78 youth trapped 1,721 gophers and 141 squirrels, earning a total of \$14,146.
- No Utah prairie dogs were mistakenly trapped.
- 78% of participants were 14 or younger.
- Local producers saved an estimated \$31,654 in abatement costs and \$50,274 in depredation damage.
- Participants spent a total of 955 hours trapping, reducing screen time and fostering hands-on learning experiences in the outdoors.
- In its first year, the program received overwhelming approval from county commissioners and conservation district board members, ensuring its continuation in 2025.

References

- Baldwin, R. A., Chapman, A., Kofron, C. P., Meinerz, R., Orloff, S. B., & Quinn, N. (2015). Refinement of a trapping method increases its utility for pocket gopher management. *Crop Protection*, 77, 176-180.



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