

Project Description

My team's project is focused on creating a tool or resource that will help gardeners with their everyday gardening tasks. We have yet to decide if we will focus on professional or recreational gardeners.

Summary of Products

While searching for gardening resources and tools I noticed ads for pest repellent type products aimed at gardeners. After seeing a few pest repellent products I decided to check on Google Shopping and Amazon and found hundreds of results for 'Ultrasonic' pest repellents. Apparently these devices emit a high pitch frequency when they detect motion, and this frequency is supposed to make the area unpleasant to certain creatures. This type of technology seems to be a form of 'Unpleasant Design', but for animals that might eat up one's garden.

A few things I noticed looking through these products is that many of them claim to repel specific types of animals. There were few of them that claimed to repel ALL pests. Also, I noticed that customer reviews for many of these products (the products below included) did not seem to have fabulous customer reviews. Both products I found to focus on have 3 star reviews. After researching these ultrasonic pest repellents and reading some reviews I am questioning the effectiveness and longevity of these devices. Many reviewers said that they do not even last a 'full growing season' (Amazon Comments) or only partially eliminate their pest problem. The goal of the users that buy these products is to find a humane and non-chemical way of ridding their garden of pests that make it difficult for them to grow anything. A competing product on the market are many forms of chemical repellants. These repellants appear to be both cheaper and more effective than the ultrasonic repellents due to the difference in customer reviews. The bottle of repellent from Target below is affordable at only \$6.99, but has almost a 4 star rating as well. It seems that as far as getting rid of pests, those wishing to be more humane and ecologically-friendly may find that they cannot get rid of pests as well as those who choose to use chemicals. Choosing between these products can be both a moral and monetary problem for gardeners.



Roll over image to zoom in

Sweeney's

Sweeney's 9012 Mole and Gopher Twin Pack Sonic Spikes (not available in HI, NM, PR)

★★★★☆ 543 customer reviews | 23 answered questions

Price: **\$21.69** ✓prime

FREE Shipping on orders over \$25—or get FREE Two-Day Shipping with Amazon Prime

In Stock.

Want it Wednesday, Oct. 18? Order within 19 hrs 49 mins and choose One-Day Shipping at checkout. Details

Ships from and sold by Amazon.com. Gift-wrap available.

Size: 2 pack

1 pack	2 pack
\$9.97	\$21.69

- Moles and gophers are chased away unharmed
- Spike covers up to 7,500 sq. ft.
- Sonic pulses emitted every 30 seconds
- Operates in a circular pattern, approximately 95 ft. in diameter
- Requires 3 "D" batteries (not included)

[Compare with similar items](#)



* Pictured with optional strobe

Guardian Outdoor and Indoor Electronic Pest Repeller

from Good Life - ...

★★★★☆ 1 product review

The Guardian by Good Life is the industry's first indoor/outdoor pest repeller and carefully designed with a tremendous amount of research and investment. The Guardian encompasses every conventional and innovative pest-repelling technique while staying completely affordable. This humane device emits different noise frequencies to ward off pests instead of using poisonous chemicals making it the safest and most environmentally-friendly pest repeller on the market. Continuous or Motion Sensor Activated. 100 ft Motion Sensor Range. 5000 sq ft Sound Distance (Choice of Audible or Inaudible Sound). Exclusive Keychain Remote (up to 80 ft). Safe and Humane. Select Pest Technology. Strobe Light. Adjustable Sensor Sensitivity. Battery or AC Powered (110V AC Adaptor included) < less

\$69.95

+ \$11.95 shipping. No tax
Good Life - ...

[Shop](#)

\$39.95 Good Life - ...

\$44.95 eBay

\$43.99 eBay - checkoutwendysfashionavenue

[Compare prices from 3 stores](#)



Roll over image to zoom in

Wondercide

Wondercide All-Purpose Organic Home & Garden Insect Control 32 oz Spray

★★★★☆ 81 customer reviews | 18 answered questions

Price: **\$19.99** ✓prime

FREE Shipping on orders over \$25—or get FREE Two-Day Shipping with Amazon Prime

In Stock.

Want it tomorrow, Oct. 17? Order within 15 hrs 33 mins and choose One-Day Shipping at checkout. Details

Sold by Wondercide and Fulfilled by Amazon. Gift-wrap available.

- Made in the USA with non-toxic, food grade ingredients so it's safe to use around food.
- Repels Roaches, Ants, Flies, Gnats, Dust Mites, Moths, Aphids Scale, Garden Insects, & much more!
- How Long Does it Last? This insect control spray can be used as often as everyday to freshen air, pet bedding, or to accomplish indoor and outdoor objectives. It's chemical-free and non-toxic, so you can't use too much. It's best to perform routine pest control once every six weeks or more frequently as required to establish control over the environment in certain climates or seasonal times of the year.
- How Does it Work? The aroma of cedar creates a barrier of re-entry, making the treated area off limits to any flying insects or crawling pest.

Garden Safe® Multi-Purpose Garden Insect Killer Ready-to-Use - 24oz Spray
[shop all Garden Safe](#)



\$6.99

★★★★☆ 1 | 1 question

1
qty

add to cart

shipping to 98101

get it by Tue, Oct 24 with standard shipping

get it by Wed, Oct 18 with express shipping

only ships with \$25 orders [details](#)

free order pickup

not sold at Seattle Pike Plaza

[find at another store](#)

[registry/list](#)

Sources

- Amazon for the 'Wondercide' and 'Sweeney's' product reviews and images (shown above)
- Google Shopping for 'Guardian Indoor & Outdoor Electronic Pest Repeller' review and image (shown above)
- Target for 'Garden Safe' product review and image (shown above)
- *The Spruce* for information on how to repel pests (i.e. types of products on the market)

Interview Questions/Protocol

Hello, we're designers at UW and we're trying to learn about gardeners and create something that will make their day-to-day operations simpler.

1. What got you interested in gardening?
 - Did someone get you interested or did you find it on your own?
 - What do you get out of gardening?
2. What's your favorite thing to use while gardening?
 - tools, online resources, apps, books, etc.
3. Experience Level?
 - How long have you been gardening?
 - Difficulty of things you grow?
4. Hobby or profession?
5. Do you have a specialty? (Do you grow something specific?)

6. What has been your most frustrating experience with gardening?
 - What helps you to persevere when you get frustrated? (resources/tools/personal motivation)
 - What do you do to solve these frustrations?
7. What would your ideal tool or resource to help you garden look/work like?
8. What does your regular day look like?
9. What is your daily gardening routine like?
10. What does gardening mean to you?
11. Do you garden at home? Community gardening? Professional?
12. Is there something you wish you could grow but can't?
13. Are you in a gardening club?
14. Do you have friends that garden?
 - Do you garden with them or use them as a resource?
15. How do you gain new knowledge about gardening?

Interview Responses

Name: Julie Pomante

Age: 57

Gender: Female

1. Love of flowers, aesthetically pleasing yard, fun activity
 - a. Stress release, time to think
2. Tools, books, watch someone techniques
 - a. Basics: shovel, clippers, pruners, saws, three prong thing
3. 25-30 years, beginner, somewhat knowledgeable, still a lot to learn
4. Hobby
5. Specialty: enhancing every year, goals: deer and turkeys ruin goals every year
 - a. Because of wildlife have to change how I garden
 - b. Pick an area to improve in yard every year
 - c. Put vegetables
 - d. Problem solve to get around deer and wildlife
6. Wildlife, weather somewhat (snow)
 - a. DEER
 - b. Dogs don't help
 - c. Solves problem: growing deer resistant plants,
7. Pruner and scissors a lot, don't like electric tools, takes longer but I like precision
 - a. Use scissors to trim
 - b. Handheld tools are ideal
 - c. Scissors, pruners, three pronged thing
8. Regular Day?
 - a. Wake up, run, garden, walk the dogs, water, make dinner, go to sleep
9. Maintenance, one area to another, work around the yard
 - a. Depends on season

- b. Trimming leaves in autumn
 - c. Sections to sections
10. Aesthetics
- a. Therapeutic
 - b. Like working in the dirt
 - c. Repetitive but gives you time to think
 - d. Thinking but getting something accomplished
11. Garden at home
12. Too cold, sun limited
- a. Between climate and deer hard to grow a lot of fruits and vegetables
 - b. Abundant garden would be nice
13. No gardening club
14. Friends that garden? Not really but talk to neighbors about their gardens
15. Books and google
- a. How to solve different things
 - b. Stores where I buy supplies
 - c. Kind of stores?: Home Depot, ask in gardening center

References

https://www.amazon.com/Sweeneys-9012-Gopher-Spikes-available/dp/B000SZV6KU/ref=sr_1_8?s=lawn-garden&ie=UTF8&qid=1508208865&sr=1-8&refinements=p_n_feature_keywords_brrowse-bin%3A4845087011

https://www.google.com/search?q=pest+control+devices+for+gardeners&rlz=1C5CHFA_enUS766US766&source=lnms&tbnm=shop&sa=X&ved=0ahUKEwjlk6-0_bWAhUQ-GMKHd8zAqc_Q_AUICigB&biw=1284&bih=671#spd=7360024897605832620

https://www.target.com/p/garden-safe-174-multi-purpose-garden-insect-killer-ready-to-use-24oz-spray/-/A-51161085?ref=tgt_adv_XS000000&AFID=google_pla_df&CPNG=PLA_Patio+Garden+Shopping&adgroup=SC_Patio+Garden_Top%20Performers&LID=70000001170770pgs&network=g&device=c&location=9033309&gclid=EAJalQobChMlleSFgdv21gIVmbfACh0w2gTCEAQYAiABEgIvsPD_BwE&gclsrc=aw.ds

https://www.amazon.com/dp/B00KPBWR2I/ref=asc_df_B00KPBWR2I5219269/?tag=hyprod-20&creative=395033&creativeASIN=B00KPBWR2I&linkCode=df0&hvadid=167152392179&hupos=1o1&hvnetw=g&hvrand=12291748177377562382&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9033309&hvtargid=pla-373095705597

<https://www.thespruce.com/garden-pest-control-1402737>

