KEEPING CRITTERS OUT

Vegetables and fruit are a very nutritious and tasty part of the human diet. It is not surprising they also seem to attract the interest of wildlife. Vibrant fruits and vegetables are even more attractive to many animals when other vegetation is brown and dried out. This means one of the biggest challenges to growing vegetables and fruits in Wyoming can be keeping the wildlife from eating your crops before you have a chance to harvest them. Deer, rabbits, raccoons, skunks, gophers, birds ... the list is lengthy; however, while there are different parameters with each species of wildlife, when it comes to edible crops, exclusion and sanitation are the general approaches for many wildlife species.

Exclusion involves techniques that keep critters from being able to get to your crops-often fencing of various types. Sanitation is the practice of keeping areas around your property clean so they don't attract wildlife. Trapping can be used with some species of wildlife. Consult your local Wyoming Game and Fish Department personnel or Weed and Pest Control District (for some smaller species) to see if trapping a wildlife species is legal before you proceed. Many of our wildlife are considered game species, and their taking is governed by law. There are also repellents that can be used to deter wildlife; however, many of these products should not be applied to edible plants that have parts that will be eaten by humans. Also, repellents are variable in their effectiveness, must be reapplied periodically, and may only work where wildlife populations are low.

Exclusion usually involves the investment of time and money, but often yields the greatest benefits as long as the fences or other structures are maintained. Think about fencing the plants you value most when it comes to making the most of your investment of money and time.

When considering fencing, migratory and other movement patterns of wildlife should also be taken into consideration. Fencing your whole property with critter proof fencing may create barriers to the movement of wildlife across the landscape, so consider just fencing critical areas such as vegetable plots.

Selecting methods for keeping wildlife from eating your vegetables or fruit crops is dependent on the proper identification of the animals that inhabit your area and/or are eating your crops. Visit our "Wildlife" web page at <u>barnyardsandbackyards.com</u> for links to information that will help determine which animals are eating your crops or visit your local University of Wyoming Extension or Weed and Pest Control District office for assistance.

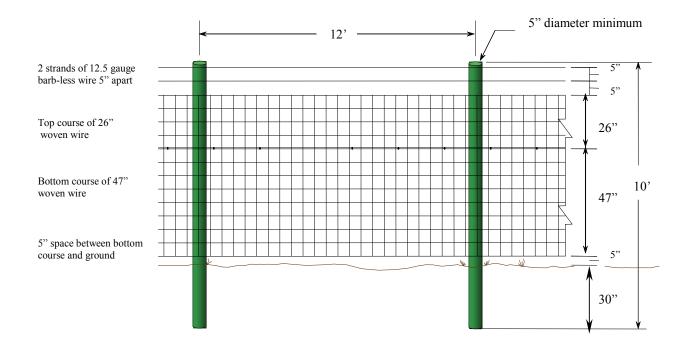
The effectiveness of exclusion methods depends on the capabilities of the animals involved and how motivated (by hunger, being chased, or other factors) they are to get through or around barriers. Exclusion methods tend to be most effective if they are implemented before wildlife start eating your crops (before they have learned that your garden is better than their normal fare). For animals such as deer, fences are also more effective if your vegetable plots aren't in the vicinity of existing routes of travel (deer paths). These animals will thoroughly investigate and test any new structures that appear in their usual areas of use.

Exclusion methods can be temporary-hardware cloth wire structures over newly planted seed to keep squirrels and birds from eating the seed before it sprouts, temporary electric fencing, netting of fruit bushes or trees to keep birds out until fruit is harvested, etc. — or more permanent — such as fencing or walls.

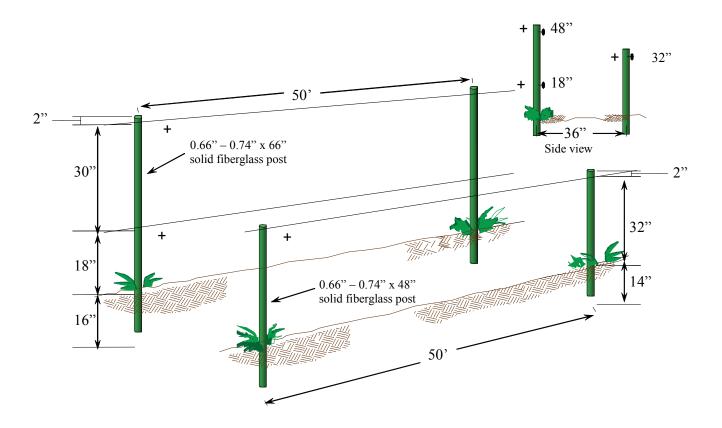
BRIEF TIPS ON WILDLIFE EXCLUSION

Deer

Deer are one of the more common raiders of gardens in Wyoming. Since deer are excellent jumpers, expect to build a fence that is at least 7 feet tall. Some feel that an electric fence is more effective, but keep in mind placement of the live, or hot, wire is critical



8-foot woven wire fence (above) and 3-D electric fence (below).



Illustrations: Wyoming Game & Fish Department publication "Fencing Guidelines for Wildlife" (Habitat Extension Bulletin No. 53) A link to this document can be found on our "Wildlife" web page at <u>barnyardsandbackyards.com</u>:

as well as the number of live wires. It is usually recommended that the placement of the live wire is 36 to 46 inches off the ground. Also remember wildlife can stretch their necks through a fence to get a few nibbles in, so keeping the fence a few feet away from consumables is a good idea.

Eight-Foot Woven Wire

Deer, elk and moose damage can be prevented with an 8-foot woven and smooth wire fence. This fence should be constructed with a bottom course of 47-inch woven wire, a top course of 26-inch woven wire, and two strands of smooth wire above the woven wire, see illustration previous page.

3-D fence

This fence design has been very successful at excluding white-tailed deer from orchards, tree farms, and vegetable gardens in many places throughout the United States, see illustration previous page It has not been tested thoroughly in Wyoming against mule deer; however, it has been tried in the Big Horn Basin around vegetable gardens and has worked very well. It is unknown whether or not this fence will effectively exclude other species. The basic principle is that deer are not comfortable jumping a fence that has both height and depth. Depending on your goals, this fence can be constructed with high-tensile wire (permanent fence) or with poly-rope or tape (temporary).

Electric fence

Electric fence can be useful for keeping out larger animals such as mule and whitetail but can be also used to deter smaller animals such as raccoons or rabbits. Many electric fence systems can be purchased at local home and garden stores or ordered over the internet. An electric fence system can be a useful tactic depending on the size of the area and the types of animals you are looking to keep out. Electric fence systems can be taken down each fall when crops have been harvested. Please keep in mind electric fence can be a bit traumatizing for pets and humans that are surprised by touching the fence without prior knowledge. Finally, grounding electric fence to ensure proper operation is an important issue in dry soil areas (wire return systems generally work better than earth return systems), so do your homework before you build electric fencing, and get a tester to check if it is working properly.

Antelope/pronghorn

Unlike deer that jump, antelope generally go under fences. If pronghorn are your issue, you can usually get away with a shorter fence. A 4- foot tall woven wire, with a couple of extra strands placed above it, is usually sufficient) but you must ensure the bottom strand of the woven wire fence is in contact with the soil surface.

Moose and elk

While moose and elk are less likely to be a problem in your garden, they can still be attracted to whatever fantastic fare you are growing. You can follow the same recommendations for deer to keep them away. Just remember, when a moose or elk decides to go through a fence, they usually do, so the sturdier you can build it, the better.

Other four-legged creatures

Having issues with the smaller four-legged critters like skunks, raccoons, and rabbits? There are a few things to consider. Are they diggers? If so, it is best to bury mesh fencing that has quarter inch in size or smaller squares at least one foot deep. And remember they are good diggers, so you have to be, too. Make sure to make a 90-degree angle at the base of the fence and tack the fence down before you bury it to make sure they don't just dig it up or dig under it.

On the other hand, some small mammals are also good climbers. Some recommend placing a 3-to 4-foot fence with a 1-foot top that is unattached at the top of the fence so it will fall back on the animals as it climbs.

Rabbits

Rabbits are one of the most common raiders of gardens! Generally, a 2-foot high fence will keep out cottontails and a 3-foot high fence will exclude jackrabbits; however, include an additional portion of fence so it can be buried to keep them from digging into your vegetable plot.

Rabbits can also be an issue during the winter when we least expect it. If you grow fruit shrubs or trees and are considering fencing, you need to make sure to build your fence a foot higher than the deepest snow so they can't easily get over the fence when the snow is on the ground. Be sure fencing used to exclude rabbits doesn't have holes that rabbits can squeeze through–if using wire fencing, holes should be less than 1-inch wide or tall.

Raccoons

Raccoons are also common raiders of vegetable crops. Raccoons are nocturnal and usually travel in family groups or three or more. Due to their strength, digging and climbing abilities, electric fencing is usually the best deterrent to keep raccoons out of gardens. This can be done by building an electric fence or by using electric fencing components to add an extra layer of protection to existing fences.

Raccoons will sometimes force their way through an electric fence. If the fence is not built early, they will still get into the garden. They particularly prefer sweet corn. If protecting sweet corn, the fence must be built before the corn tassels. Strands must be 4 inches off the ground and 4 inches apart and at least 3 strands high.

Pocket gophers

Pocket gophers can be an issue in Wyoming. If you are growing in a smaller area, consider creating raised beds that have a layer of galvanized welded wire mesh (hardware cloth ¼- to 1/2-inch mesh) attached to the bottom. Raised beds should be tall enough (18-inch+) to deter pocket gophers from crawling up onto them. Gophers eat the roots of all plants, particularly trees and fruit trees. It is extremely hard to exclude gophers from eating the roots of trees, and eliminating the gophers is generally more practical; however, this can be challenging as well. Wire should never be placed around the roots of trees to prevent damage as the wire prevents proper root growth. Trapping gophers is likely the only way to eliminate them from your landscape and often requires a lot of persistence by the trapper.

Voles

Voles are small mammals that are very active during the winter. These pesky critters are known for eating the soft bark of young fruit trees during the winter under the cover of snow. If left unchecked, voles will eat all of the bark around the base of the tree and girdle the tree, cutting off the transport of water and nutrients in the trunk, leading to eventual death. To avoid damage from voles, ¹/₄-inch wire mesh fence should be place around the base of the tree during fall, winter, and spring to protect young fruit trees. The mesh should be at least 12 inches tall. It should be placed so the bottom is slightly below the soil or mulch around the base of the tree to prevent voles from crawling underneath the fence and then secured in place so it does not rub against the bark of the trees when the wind blows, etc.

Birds

Birds can be attracted to seed or fruit crops. Bird netting or row cover can be used to exclude them from crops. Netting should be placed over a supporting structure so birds can't peck through the netting and reach the crop. Netting should be securely attached to the ground so birds don't go underneath it and get entrapped.

AVOID ATTRACTING WILDLIFE

Sanitation is an important part of not attracting wildlife to your place. Make sure garbage, active compost piles, pet food, and water sources are located where wildlife can't access them.

If you don't want smaller creatures to take up residence in your home or outbuildings, make sure that any entry routes into these structures are blocked off.

There are also gardeners who swear by methods such as motion detection lights, motion activated

sprinklers, or even inflatable objects that act like a surprising scarecrow. While these methods can work wonders, fences may be the best long-term defense. There are many commercial options available if you are interested in doing research on these tactics.

As you can tell, there are many ways to protect your delicious fare from animals you may not want to share with. One of the most important things you can do is identify the wildlife that is enjoying your garden. That will determine the best exclusion method for you! For more information on methods to protect your produce, visit <u>barnyardsandbackyards.com</u> and click on "Gardening" or "Wildlife".



Bird netting has been draped around this 'Bali' cherry tree and secured at the bottom so birds cannot crawl under. Row cover and clips can also be used for this purpose on smaller trees or bushes for a shorter time period (as not as much sunlight will get through to the leaves). No fruit would be left for the grower if protection was not used.