

## Finding your Hot Spot

By Ashley McNamara

If you stumbled on this webpage because you thought it was something racy, you might be disappointed. Unless, of course, gardening makes your heart pound...

So just what is a "hot spot" in the garden? A hot spot is like a little slice of a relatively warm microclimate, a place where the soil temperature on the average is higher than it is in other places in the surrounding landscape. You could run around your landscape with a soil thermometer and take the temperature of several different randomly selected spots to try to figure out which one is the "hot" one, but this isn't really necessary. You can deduce from clues about where your hot spot is.

First, hot spots invariably face south. A good southern exposure is critical to the creation of a hot spot. The site may be more south-east facing, or more south-west facing, but it will not face directly due east or west, and obviously it won't face north (I could think of an exception where the hot spot faces a volcanic vent or thermal spring, but I guess you could say the exception proves the rule here). The more the site faces directly due south, the better. A site that faces southwest will be warmer than one that faces southeast, simply due to the fact that afternoon temperatures are higher than morning ones. Secondly, there is a "backstop" of some sort on the north side of the area. That backstop could either be natural, such as a rock outcropping, or man-made, like a building or concrete wall. The backstop not only serves to reflect heat from the sun back at the site, concentrating its effects during the daytime, it also radiates heat during the night as well, keeping the whole area warmer than its surroundings nearly all the time. The backstop will also create an eddy which protects the site from wind. The one downside of this is that in the wintertime snow will not cover the hot spot as well as would have happened if the backstop had not been there (I'll explain why this is a potential problem later). The location of a hot spot may slope to the south, but this isn't an absolute necessity. The hot spot should not be shaded, by trees, buildings or anything other than the backstop itself, for more than a couple of hours a day. This is especially true around noon, when the sun is at its highest. One other clue to finding your hot spot is that heat-loving plants that aren't as vigorous or never set fruit elsewhere in your landscape will manage to do so in the hot spot. If you are a careful observer of your gardening landscape and the plants within, you should be able to deduce where your hot spot is without ever taking any actual measurements.

Once you figured out the location of your hot spot, it can sometimes be another problem altogether to decide how best to exploit this special microclimate and use it to your best advantage as a gardener. For instance, what if your hot spot is in your driveway, right up against your garage? What if you have a site that slopes to the south, but there is no rock outcropping to serve as a backstop? What if your hot spot faces more east than south? What if you have a hot spot, but it is so dry that few plants manage to survive there? Each garden is unique, and it's not possible for me to give advice that is "one size fits all" for each one of these

situations, but I will present a few ideas that should get you started in the right direction towards finding solutions that work for you and your individual gardening situation.

If your hot spot happens to be a spot that is paved over, such as driveway, stone patio or sidewalk that runs along the south face of a building, probably the best solution here is container gardening. Containers can provide an ideal home for nearly any type of vegetable you would care to grow in your garden, even carrots. It's just a matter of finding the right one to fit your plants' needs. Lettuce and other salad greens can be grown in a shallow container, such as an azalea pot (hint: start your greens here in the spring; as they begin to mature and the weather gets warmer, move them to a cooler area to help keep them from bolting). Big pots, such as those ten gallon plastic ones that trees come in, are fantastic for growing tomatoes, squash and cucumbers. I have a number of these, none of which I've actually purchased. I've managed to round them up, one at a time, by picking them up at recycling centers, asking permission to take them from professional landscapers, and stopping to grab them at the side of the road, as the empty ones often get blown off of trucks (no, I'm not trying to talk anyone into dodging freeway traffic. I've found that residential city neighborhoods, especially new developments, are full of these, especially in the springtime). All it takes is a little bit of observation and perseverance to collect a whole bunch of them. Additionally, some people make use of five gallon plastic buckets, which can be garnered in much the same manner. Just be sure to drill a hole in the bottom of the container to provide for water drainage. Tender perennial herbs that like to winter over indoors, such as rosemary and thyme, can be displayed in attractive clay or ceramic pots.

If your hot spot faces more east or west than south, or if there is no backstop, one way to make the best of the situation is to create a backstop on the north side of the site that is super radiant. Something that contains water will probably be your best bet here. This could be a rain barrel type container, a raised pond, or even a sealed container (or containers, such as one gallon jugs) filled with water. Just as it takes a good deal of energy to raise the temperature of water, water is also a reliably good way to store heat energy. It will absorb that energy from the sun's rays during the day, and at night release it slowly but surely, effectively providing the plants nearby with a hot water bottle after any day which is a little bit sunny. Covering your water container with black plastic or painting it black will help even more. Building a wall of bricks, rocks or concrete is a second best option. Remember that the darker the color of your wall, the better it will radiate heat back at your plants. In addition with providing the site with a backstop, you could also build a raised bed in which the soil is sloped to the south. This will require the use of mulches, landscape fabric or perhaps a cover crop such as oat grass to stabilize the soil.

What if you have a hot spot, and it's a great one, except for one small problem; it's too dry to support any vegetable plants (at least, any vegetable plants that someone without four stomachs would want to eat)? Even more so than cold, lack of moisture is a real handicap to the mountain gardener. The fact that a backstop creates an eddy poses a bit of a problem: during the winter, snow blows in such a way that it piles up a distance away from the hot spot, which may translate into the ground being bare and dry when spring comes and the drifts melting into soil elsewhere. Deep soil moisture is critical to seedling vegetables as they struggle to develop

strong root systems, which are key to plant health and vigor later in life. How can you help divert moisture to the hot spot and keep it there? If you don't have a domestic well permit, and trucking water in is too expensive and impractical, don't give up. Several techniques can be used to make the most of the precipitation that does fall.

First, you can line the garden bed of your hot spot with durable landscaping plastic. Be sure it is buried eight inches deep at a minimum and poke a small hole in it about every six inches to provide some drainage to your vegetable plants. (Irene- do you have more explicit instructions on how to do this that we could create a link to here?) Also, if your hot spot is anywhere near a building, you can probably find a way to divert water from rain gutters towards it. Those black plastic tubes about four inches in diameter that are made to connect to the end of a downspout can be placed in such a way that they empty into a garden bed. Cut or drill some holes along the length of them that is contact with the soil of the hot spot. If you find them unsightly, they can be buried at a shallow depth, or disguised with clever use of some boulders or flagstone. Also, try adding hydrophilic crystals (available at garden centers) to help increase the absorbency of the soil. Adding organic matter to the soil increases its water holding capacity as well. Finally, organic mulch is your best friend when it comes to conserving water in your landscape. Use compost, wood chips, weed free hay, alfalfa pellets, or well-decomposed manure with generous abandon to seal moisture below the surface of the soil, where the plants' roots can use it.

Now, it's up to you to take responsibility for exploring and enjoying your own hot spot!

Captions for the photos:

Squash, tomatoes and tomatillos enjoy the sun in containers in my hot spot, up against the doors of my garage (it's a good thing there's no room to park a car in there). I've painted the outside of the plastic pots to complement the color of the

garage.



Salad greens get an early start in my hot spot. I'll move them to a cooler location later in the spring.

