

Creating garden microclimates with walls

The old saying goes, “Everyone talks about the weather, but no one does anything about it.” But building even a small wall in your garden does do something about the weather — it creates microclimates around the structure. Microclimates are pockets with substantially different environmental conditions than their surroundings.

For example, depending on the direction the wall runs — north-south, east-west or some variation — the shadow it casts will turn previously full-sun areas into part-shade or

even full-shade areas. Yet even in summer, when the sun is higher in the sky and both sides of the wall may get plenty of sun, one side will get more afternoon sun. The ground on this bright side may become so dry from reflected sun and convected heat that plants that grew well in the area before the wall was built will now end up toasted. You’ll want to consider more sun- and heat-tolerant, low-water plants, such as lavender (*Lavandula* spp.) or sage (*Salvia* spp.), to go into these now hotter, drier areas.

On the other hand, in the fall, when the sun is lower in the sky and shadows grow

longer, the part-shade bed created on the darker side of the wall will be in full shade. So plants that like a broad range of light and moisture conditions, such as periwinkle (*Vinca minor*), would be a good choice there.

A wall also creates a wind break. The breezes that may have formerly dried or chilled the garden are deflected. Pockets of still air form warmer or cooler areas on the side of the wall away from the winds, depending on its exposure to the sun. This may give you the opportunity to grow plants that otherwise wouldn’t survive in your cold-hardiness or heat-tolerance zone.

Because the temperature, moisture and wind conditions are so different, sunlight can vary from 10 to 15 degrees on either side of a wall. You might be able to coax a zone 7 plant to grow and bloom in zone 6. But be aware that those flowers or shoots could be damaged by a surprise frost.

As you can see, installing a wall gives you a lot to consider. The illustration below shows some of the microclimate conditions a wall creates. By understanding and controlling these microclimates, you can use walls to your advantage. You may even extend the range and seasons of your garden! •

