Shoveling snow and lawn care overlap during Utah’s sometimes two-month long transitional season. If you can actually see your lawn, you might want to consider applying a pre-emergent herbicide.

Crabgrass and spurge love to wait until about mid-June to invade lawns, but rest assured they are planning their invasion right now. They require warmer soil temperatures than those early risers currently assaulting our landscapes. However, by the time you notice them, it is too late to do much about them. A pre-emergent can be used for control, says Jerry Goodspeed, Utah State University Extension horticulturist.

“Normally I recommend the first application be put on around the first of April,” he says. “If the late winter weather is warmer than normal, the timing may need to be moved up a week or so. One area in the landscape that can be a problem with these two weeds is along the driveway and the sidewalks. The soil warms faster next to cement or asphalt so the crabgrass and spurge germinate quicker there. If the areas around sidewalks and other paved structures have been a problem in the past, the pre-emergent may need to be applied earlier.”

What exactly is a pre-emergent herbicide? How can a chemical selectively know which plants to kill and which ones to leave alone? Why can’t we develop a chemical to just kill all weeds, and leave the edibles and ornamentals alone?

A pre-emergent is an herbicide (weed killer) that is placed on the soil or turf before the weeds begin to emerge, explains Goodspeed. Contrary to popular belief, a pre-emergent does not kill the seeds or keep them from germinating. That would be nice since some of the hardiest weed seeds can stay dormant and alive in the soil for up to 50 years.

“To simplify how a pre-emergent works, imagine that it forms a thin layer right at the top of the soil level,” he says. “This is not completely true, but it’s close enough. This layer of herbicide contains a mild poison that is strong enough to kill any germinating or emerging plants. Since the roots are small and tender, it does not take a lot of poison to do the job. Plants that are already up and growing do not have to pass through this layer of herbicide and so are not affected. They have a strong enough root system to sustain continued growth.”

Various types of pre-emergent herbicides have different strengths, Goodspeed cautions.
Some are more potent than others. That’s why it is so important to read the label carefully before applying a pre-emergent to the lawn, flower beds or any other areas. A few pre-emergents are not recommended for the lawn because they kill grass equally as well as annual weeds.

“A pre-emergent will not control all weed problems, but it is a tool to use in the fight against those nasty pests,” he adds. “Many perennial weeds have such large, strong, invasive root systems that they push right through the layer of poison and occupy lawns and flowerbeds anyway. But, pre-emergents are pretty effective on most annual weeds.”

For more information, contact your local [USU County Extension office](http://www.usu.edu).