Ah, that perennial question! What's eating holes in the leaves of my hosta? By mid-summer they're all chewed full of holes, and look terrible (rest assured, this won't kill the hosta they're tough plants, it just makes them look ratty for that season.) Well it's slugs chewing all those holes in the hosta leaves. These dreadful creatures even have a loathsome name! If there are a lot of holes, then there are probably a lot of slugs! The common culprit in our area, is a grayish tan creature about one half inch long and about as big around as a pencil. It has two antenna on its head and is very slimy. It looks like a snail that lost its shell. In fact, it is related to the snail. They are active at night and on cloudy days, chewing all those holes in the leaves of our favorite plants. Telltale signs are the slime trails, shiny squiggly lines they leave behind as they crawl across the ground. Slugs reproduce by laying eggs, up to 50 in a clutch. Slugs are active when nighttime temperatures are above 50 F, and there is ample moisture, either from rainfall or watering. It's a good case for watering early in the day! They also like a damp, dark daytime hiding places, beneath leaf litter, mulches, dense ground covers, etc. By cultivating soil around plants the eggs can be destroyed, reducing slug populations. Also a good cleanup in the fall will reduce the amount of eggs over-wintering in plant debris.

If you go out at night with a flashlight and a bucket of soapy water, you can hand pick them from your hosta leaves, and drown them in the bucket; they aren't good swimmers! Check the undersides of the leaves carefully. This can become a daunting task as there can be many generations to contend with. It is also not for the squeamish handling those slimy little creatures. You could wear rubber gloves, or use tweezers. Some gardeners just suck the slugs off the leaves of their plants with a 'Dust Buster' hand held vacuum cleaner, then dispose of their catch by emptying the bag into the soapy water. Another remedy is to get a can of beer (any brand will do, slugs aren't fussy) and pour some into all those little margarine tubs we have gathering around the house. Slugs attracted by the yeast will fall in the tubs and drown; they aren't good swimmers, remember. The beer will have to be changed every few days to refresh the solution. Also pour the contents onto the ground, because other slugs are attracted by the dead bodies of their own kind. If your slugs aren't old enough to drink yet, you can mix a concoction from two tablespoons of flour, one teaspoon of yeast, one teaspoon of sugar, to two cups of water. It should give similar results, with great taste and is less filling!

If all this sounds like a lot of work, it is. After all, this is a war were talking about here! These beasties are eating our favorite plants. Time to pull out the rest of the arsenal! You can also lay boards, or tightly rolled-up damp newspaper on the ground, check them every morning and scrape the hiding slugs into your bucket of soapy water. Melon and grapefruit rinds, inverted plastic flower pots, or anything that supplies that damp dark environment will attract slugs to hide during the daytime. Also slugs do not like copper. It gives them a shock. Barriers made of pure copper, or copper flashing at least three inches wide are effective. It can be expensive to surround large beds with copper, but a few prized specimen plants could be surrounded with copper barriers. Another effective control is diatomaceous earth. This is the finely ground shells of ancient sea creatures. It is available at garden centers and is a fine powder that can be sprinkled on the plants and ground. As slugs crawl over the powder it scratches their soft bodies and the slugs die from dehydration. Care must be used when spreading the fine powder so as not to breathe the
dust as this can irritate the mucous membranes in our bodies as well. Eye protection and a dust mask should be worn as a safety precaution. Diatomaceous earth will have to be reapplied after a rainfall or sprinkling. Another reported remedy in the arsenal is spraying the slugs with a dilute solution (4:1 or even weaker) of household ammonia and water. Experiment with dilution rates and test different plants on only one leaf before broad applications are made. Ammonia is a source of nitrogen which may burn the leaves of plants. Another nitrogen remedy is a light application of ammonium based fertilizer on the soil surface around each plant. It must be reapplied after rain or sprinkling. Many formulas of ammonium based fertilizer available in garden centers, and care must be used so over application is not made, and burning is not caused. Also application of high nitrogen fertilizers late in the season is not be recommended, as it could cause tender new growth that may be damaged by an early frost.

Time to call in the reinforcements! Toads, ground beetles, lightening bug larvae, garter snakes, moles, shrews, and wrens all prey on slugs. These are natural means of slug control, and will also be affected if you resort to chemicals. Chickens, ducks, and geese are also effective if you have a country location that permits keeping them. It has been reported that a slug eating nematode (a microscopic worm that doesn't harm plants) is being tested in Great Britain, and is showing some promise. Slug eating nematodes won't be available for a few years though.

If all else fails it may be necessary to resort to chemicals. Various slug baits are available from garden centers. The active ingredient in these baits is methaldehyde. It paralyzes slugs after they ingest it. They are unable to crawl for shelter after the sun comes up, and they die from dehydration. If the weather is cool and rainy however, the slugs may not be affected as much and may survive an otherwise lethal dose. It is also toxic to other creatures, as well as pets, which sometimes ingest poisons not meant for them. Any chemical-laden slugs should be disposed of so as not to accidentally harm other animals like birds, or our group of reinforcements we called out to help earlier. Overuse of chemicals can be a serious problem, and various populations of slugs can become resistant to them over time. Always use chemicals carefully and follow all directions and safety precautions. These chemical solutions should be used carefully, and not around food crops.

Some hostas are more slug resistant and slugs don't find them as palatable! They are the hostas with thicker, heavier leaves, sometimes referred to as substance. By intermixing these in our hosta beds we offer a less tantalizing meal for our enemy.

Slugs eat many types of garden plants, both ornamentals and vegetables. The same solutions can be applied to many of them, except the use of chemicals on food plants. The best solution is a natural balance of predator and prey. It is nice to know however there are solutions to fall back on when the balance gets out of hand. If worse comes to worse we can hope for a drought. You may have noticed slugs are not as big a problem in years with less rainfall, but then without having to fight our battle with the slug what would we do with all that extra gardening time? Well now! About all those weeds in my hosta beds!