

with the Littleton Garden Club

Robots in the garden

BY MARY BINGMAN

Littleton Garden Club

Never in my wildest dreams had I pictured a robot weeding a garden. An article recently described this activity with a solar powered invention. A company successfully sold thousands of units to home gardeners before deciding to pursue larger robotic device sales.

There are many examples of robots being used on farms, gardens and for landscaping.

The Summer 2025 edition of Berkeley Engineer magazine had a clever article about tiny

robotic pollinators that fly and may someday be used in areas of declining bee populations. Their goal is to pollinate crops efficiently.

The main body of the flying robot is constructed by a 3 D printer. It can hover, change trajectory and even hit small targets. It weighs only 21 mil-

ligrams or 0.0000462971 of a pound. The tiny propeller-shaped device is powered by two barely visible magnets. Our bee population plays an important role in our food chain & this may be a critical solution to their diminishing numbers.

Commercial farmers have turned to robotics for solutions to problems as well. Large commercial operations use robots equipped with lasers to kill up to 200,000 weeds an hour in their fields!

An online video illustrated how fast the process can be as it moves methodically through rows of plants and can be mesmerizing to watch!

That can be a game changer for many farmers and save money that would otherwise be spent on labor costs. In time, robots could have a positive affect on crop prices for us as consumers. Additionally, there is the benefit of less weed kill-

ing pesticides applied to crops.

Children in New Hampshire can learn a lot about the range of robots used in agriculture.

NH agriculture in the classroom has worked up material for teachers.

They provide a lesson plan on robots in high- tech farming for grades 3-5.

Here is the link: <https://newhampshire.agclassroom.org/matrix/lessons/690/>

Robotic lawnmowers have been around for awhile and cost about \$700- \$4000 dollars per unit.

These autonomous robots are designed to effectively cut lawn grass. Typically they require users to set up a border wire around the lawn that defines the area to be mowed. The robot uses the wire to locate the boundary of the area to be trimmed and in some cases to locate a re-

charging dock.

Many folks may find it appealing or "trendy" to switch to lawn care robotics. One frustration happens if certain parts of a lawn can't be mowed due to a slope. Many robotic lawnmowers are built with the capability of handling most inclines or declines. That may improve safety as there are issues with mowing on hillsides. Designers thought through the concern of a mower that flips over on a slope. Most models have lift sensors; if the lawnmower's wheels are lifted off the ground, the emergency stop is activated, and blades stop spinning.

Robots are becoming an indispensable ally to farmers and gardeners alike. As interesting as that is, I am still "old school." I find peace and a sense of satisfaction that comes with weeding by hand with my knees

resting in the soil. There will be no robot moving among my perennials anytime soon.

Littleton Garden Club welcomes new members from around the area. We are an active, community minded group. Visit our craft table at the Pie Fest - Sept. 27, 11 a.m.-3 p.m. at the Community Center. To learn more about our club and

meetings visit our Web site at: <https://www.littletonnhgardenclub.org>.