During my tenure with Noble Research Institute, I have had the opportunity to visit hundreds of gardens of all types: school gardens, community gardens, backyard gardens and market gardens. During these visits, I routinely come across old tractor, truck and automobile tires repurposed as garden beds.

For generations, tires of all shapes and sizes have been used by city dwellers and country folk alike to grow fruit and vegetable crops. What is it about old tires that make them attractive for gardening?

Story continues on next page
For most folks, cost is the primary consideration. Most tire shops have no problem giving away tires destined for recycling. You will need to load your own, but this is worth the work considering the tires are free.

Because tires don’t rot or rust they will provide countless years of service when used as rubber lumber, a growing container or as a platform for bed construction. It is estimated that an intact tire can take several hundred years to breakdown. Because of this durability, the annual cost of maintaining a bed or container made from tires is very low.

Repurposing tires to support crop production is environmentally friendly. What can be more rewarding than transforming a waste product into a growing system that fosters environmental sustainability, enhances quality of life and generates wealth?

WHAT ABOUT SAFETY CONCERNS WITH USING RUBBER TIRES?

Questions pertaining to the potential adverse health effects caused by heavy metal leachates from tires arise from time to time. While there is no argument that tires contain traces of heavy metals and other organic contaminants, there is no direct evidence that intact tires or tire tread used as borders for raised garden beds leach these contaminants into the soil.

If tires were susceptible to leaching they would lose their ability to stay inflated over time. Leaching doesn’t occur (or occurs at a miniscule level) because the ingredients are bound up in the rubber matrix during the cooking and curing process. Of course, the choice to use or not to use tires in the garden is up to the individual. If you are not comfortable with using tires, there are plenty of other materials available for constructing raised bed and container gardens.

RUBBER LUMBER RAISED BED

During the past 25 years, Noble Research Institute has researched and demonstrated new and novel ways scrap tires can be used to grow specialty crops. As with most discovery projects, some concepts proved to be viable while others did not. Our first publication documenting the use of scrap tires to fabricate rubber lumber for use in raised bed construction was released in 1997. This construction guide has recently been revised and is now available in a new publication entitled, “The Noble Research Institute Rubber Lumber Raised Bed.” The new construction guide offers better graphics and is more detailed compared to the original.

EASY ACCESS RAISED GARDEN BED

In 2015, the publication, “The Noble Research Institute Easy Access Raised Garden Bed,” was released. This particular bed was designed in response to requests by gardeners for a relatively...
low cost bed with a sufficiently high growing platform to enable gardening in the standing position. It utilizes discarded truck (tractor-trailer) tires to create an elevated base, making the bed easier to access. This construction guide is available at bit.ly/easy-access-garden.

MODULAR TIRE PLANTER AND BUNK PLANTER
In the past three years two additional planters have been developed. Similar to the Easy Access Bed these planters have a higher profile compared to most raised bed and container gardens.

The Noble Research Institute Modular Tire Planter derives its name from a stack of tires. Each tire in the stack is a module serving as either a support (base) module or a growing module. The overall height and plant rooting depth of the planter depends on the number and ratio of base to growing modules used. The planter is equipped with a frame that ensures the integrity of the structure and serves as a point of attachment for accessories, such as a mini greenhouse, shade structure and crop trellis. The modular planter is nothing special to look at but offers the gardener the best value in terms of construction cost per square foot of growing area and annual maintenance cost of any of our high profile planters. The latest planter to be developed and what I believe to be the most attractive of all our tire planters is the Noble Research Institute Bunk Planter. The bunk planter uses two erect, standing semi-truck tires to form the planter frame. Dimensional lumber or sheet metal can be used to clad the structure. Due to its novel design, the bunk planter can be easily fitted with a greenhouse cover for extended season growing.

To my knowledge none of our planter models are available for purchase. In order to minimize assembly costs, all of them by design are intended to be DIY (Do-It-Yourself) projects. Some folks, depending on strength and skill level, may find the construction and assembly process for some of the beds challenging. In most cases an extra set of hands will improve project ease and speed. If you enjoy building things, I believe you will find these projects to be both rewarding and fulfilling.

USE AT HOME OR TO MAKE MONEY
All of our tire-based planters have application in the home or school garden while some have commercial application. It is our hope that the use of these new and novel planter designs will make gardening less challenging and more enjoyable, enable you to be a more productive and successful gardener, and improve your overall gardening experience.