**Building Healthy Soil**

**Segment for Week of Oct 18, 2021**

This is Julie Callahan bringing you information on shore friendly living and gardening from the Master Gardeners and Virginia Cooperative Extension. Have you heard the old adage *“It’s better to dig a five-dollar hole for a fifty-cent plant than to dig a fifty-cent hole for a five-dollar plant?”* Well, this couldn’t be any truer, and this week I will be talking about how to create that five-dollar hole.

Good soil structure is one of the most important aspects of gardening. Supplementing the soil with nutrients and improving soil pH, adding organic matter, and top dressing with organic mulch work together to create that five-dollar hole.

The first step to improving your soil is to have your soil tested. Your local Extension agent can provide you with soil test forms and instructions. The soil test report will tell you whether your soil needs lime for pH, nutrients, or both.

Organic matter also helps to maintain the pH balance of the soil and adds nutrients. Decomposing organic matter, vital for healthy root development, allows the soil to absorb moisture, ensures a continuous food source for soil organisms, and changes into inorganic nutrients used by growing plants.

Organic matter can be added as compost, cover crops or mulch. Finished compost, produced when organic matter is broken down by bacteria and fungi, is one of the most valuable landscape resources and is virtually free. Ideally, compost is created by mixing three-parts brown material (carbon) to one-part green material (nitrogen). With an abundance of fallen leaves this time of year, now is an excellent time to start a compost pile. Other sources of carbon are straw, twigs, and other old, dead plants. Fresh, green plant material, manure, and kitchen scraps including vegetable and fruit peelings, coffee grounds, and crushed eggshells provide the nitrogen.

A cover crop, such as rye grass or clover, can be planted in the fall to protect the soil from wind and water erosion and to add organic matter. It can be composted or tilled into the garden in the spring.

Organic mulches added on top will decompose and become part of the soil. Winter mulches, laid down now, serve as insulation to protect plants from severe winter temperatures. Mulching is an ideal way to gradually improve the soil and provide water-holding capabilities.

And, of course, the hole has to be dug right. If the plant has a root ball, the hole should be twice its diameter and deep enough so that the top of the root ball is level or a little higher than the soil line. Before planting, fill the hole with water and wait for it to drain through.

Soil amendments are only one of the success factors to creating a healthy growing environment. Studies have shown that plants grown in native soil consistently showed better root establishment and more vigorous growth, so be prudent when adding amendments.

For more information or for answers to your questions, contact your local Accomack or Northampton County Extension Office. Here on the Shore call either 678-7946 or 787-1361