

Do Be Careful!

“Take care” is a phrase most of us carry on those parental tapes that play in our heads at every age. We probably never did take but so much “care” and I doubt we’ve changed. Nevertheless, one thing we are well aware of is the prevalence of skin cancer so we do avoid sunburn and use sunscreen. Today, if we are not naturally tan, our enriched color comes from the cosmetic counter, not from hours prone on a beach towel!

To avoid working during the hottest part of the day is sensible since heat itself can be dangerous. Watering, pruning, deadheading is better for plants when done early in the morning: spraying is best done late day, when the air is still and the beneficial insects are less active. Totally involved in either work or games, it is easy to be unaware of or even neglect the symptoms of heat stress until you are taken ill.

The Virginia Tech Newsletter lists four environmental conditions that affect heat stress: air temperature, humidity, wind velocity, and radiant heat. Add to these individual factors of age, weight, gender, physical and medical conditions and acclimation, and you can figure out how much heat you can tolerate. If you experience dizziness, fatigue, or irritability stop working, rest in the shade, and drink water. If the heat stress progresses to heat exhaustion, indicated by loss of coordination, collapse, heavy sweating, or thirst, treat heat exhaustion by a cool half glass of water every fifteen minutes. Loosening clothes and splashing cool water on your body will help as will rubbing your arms and legs. More extreme reactions may be due to heat stroke, a life-threatening condition. If heat stroke is suspected, call 911.

Currently the overuse of chemicals has probably diminished because severe health problems have come to light incurred by this overuse. Unfortunately as one chemical has been removed from a weed-killing formula a new one may have been inserted. When plants began dying at the Carroll County Farm Museum, the gardeners were mystified. The story in the Colonial Virginia Holly Notes outlines the attempt to locate the culprit.

Eventually it was found that the use of horse manure was killing plants in both this country and in England. When two new herbicides were used to kill weeds in pastures, the residue did not hurt the cows or horses but it stayed potent in their manure, even when that manure had been aged. Nothing is a more welcome gift for soil enhancement than a quantity of horse manure, but to look this gift horse in the mouth, ask if the pastures were treated with a reduced-risk herbicide, aminopyralid, sold under the names ‘forefront’ and ‘milestone’. Incidentally, if a horse owner buys hay for his horses, he probably would not know if the hay came from a treated field.

Equally desired as a poor soil remedy is peat moss. For container gardening we have substituted coir, from coconut palms, as a way to make the soil more water-retentive, having learned that ‘mining’ peat was ecologically disastrous. Now we learn (is there no end of these admonitions?) that peat bogs are in further danger. Peat bogs

are ecosystems in wetlands where centuries of decomposition of plants can be measured in not inches, but yards, as much as 20 yards i.e. 60 feet, 720 inches.

One of the stellar benefits of such a bog is that it can store the greenhouse gas CO₂, one of the bad guys in climate change. As a carbon 'sink' a bog is valuable but when that bog is drained or burned the stored CO₂ is released into the atmosphere. What was once a boon is now a bane.

In 2007 the UN Environment Program studied the world's peat bogs –an estimated 988 million acres of them. (If you find numbers meaningless, that is about 3% of the earth's land and freshwater surface.) The study determined that the amount of CO₂ the bogs store is equivalent to about 100 years of fossil fuel emissions. That means bog loss grabs our attention. Peat is harvested in Finland, Scotland, and Ireland for use in both power plants and in homes, but the greater loss occurs in places like Malaysia and Indonesia where poverty forces people to drain bogs to create farmland.

Sadly, it is not just poor farmers but international companies are clearing bogs for managed tree farms and palm-oil plantations. Environmentalists say protection of peat bogs is both an inexpensive and effective way to mitigate climate change. We small time gardeners are being careful to check the bags we buy to make sure they contain coir and not peat moss. Small efforts, but they do add up!