The Plant Doctor's LANDSCAPE TIPS

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THE STEPFORD WIVES' LANDSCAPES

INTRODUCTION

In 1975, a new movie debuted that was quite a shocker to this young lad. In the mythical town of Stepford, Connecticut, all the homes were exquisite, the landscapes were absolutely perfect, and the shrubs and trees were manicured to the hilt (Photos 1A, 1B and 1C). And all the wives were young and beautiful. The actress who starred in the film was Catherine Ross of "Butch Cassidy and the Sundance Kid" (with Robert Redford and Paul Newman). Now, how were the husbands of Stepford supposed to keep the community in a state of idyllic perfection when their wives were becoming more independent and free-thinking? One by one the wives would disappear and then return several days later as the same beauty their husbands had married . . . except, their disposition had changed dramatically. The "new" wife was obedient, subservient, and fawning all over their husbands – the "remodeled wife" could not wait to get that new recipe to make a perfect meal to please her husband. As the movie progresses, we eventually learn that the wives had been turned into robots – they would remain forever young and administer to their husbands' every need "til death do us part". The movie was really about men's fear of the changing cultural periods of time involving respect for women's rights and freedoms. The movie was called ***The Stepford Wives***. It was considered a "satirical thriller", a "horror classic" and a "science fiction thriller". It was based on a 1972 novel written by Ira Levin. Eventually in 2004, a remake was released starring Nicole Kidman (Photo 2 . . . author's note: I honestly have not seen the newer remake).

Photos 1A, 1B & 1C: Three landscapes that could be found in the mythical community of Stepford where in the present time capsule, all plantings are forever young and beautiful. Photo 1C is the beautifully landscaped median of Woodward Avenue in Bloomfield Hills.

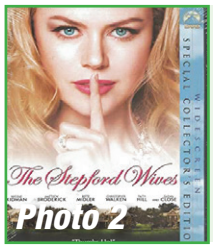

Photo 2: The poster for the second rendition of "The Stepford Wives" starring Nicole Kidman.

Over the many years in performing my duties as a scientist to solve plant problems in our industry, I worked with arborists and landscapers who were expected to create ideal landscapes and surroundings for our clients who expected perfection from us. On many occasions, I have thought back to that 1970s film, "The Stepford Wives", because it seems we are often attempting to create a beautiful landscape environment but it is highly artificial, unnatural and which may be extremely difficult to maintain in such a state of euphoria . . . and certainly, is not always sustainable. Permit me to share some of these experiences and thoughts.

THE GREAT FLOOD

Supplemental water through irrigation can enhance the health and beauty of our landscapes . . . if properly managed. However, irrigation is often the nemesis of a healthy landscape, particularly in its excessive use. My moto has often been: "If God or Mother Nature had wanted plants and trees to be watered daily, she/he would have installed automatic irrigation systems in the Forests". And like the Maytag repairman, I would be out of a job if water were managed properly throughout our industry. I suspect the failure of proper water management is the greatest contributing factor to plant problems in the landscape where lack of or, more often, excess irrigation contributes directly to the demise of many plants whether they be herbaceous annuals and perennials or shrubs and trees. We must remember that roots need oxygen in the soil to take up moisture; waterlogged roots will cause plants to wilt as though there is a drought. Excess moisture can also lead to diseases caused by microbes; these diseases include root rot, stem rots and foliar spots/blights (Photos 3A & 3B). Mists generated from sprinkler irrigation systems can encourage development of leaf blights, leaf spots, and anthracnose even high into trees. Regarding trees, it is never

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Photos 3A, 3B & 3C: Irrigation creates mists and high humidity which can encourage the attack of trees and other landscape plants by disease agents. Photo 3A represents "Scab" (fungus) on crabapple; leaf lesions (Inset) cause early and sometimes severe defoliation of trees by midsummer. Photo 3B represents Phytophthora root and stem rot on Rhododendron encouraged by excessive irrigation. Irrigation systems should never strike the trunks of trees on a routine irrigation schedule (Photo 3C).

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a good practice to allow frequent overhead-style irrigation to strike the trunks of trees because doing so can predispose trees to trunk and collar rot disease (Photos 3B and 3C). Remember, "If God or Mother Nature . . ." The type of irrigation (drip, sprinkler, bubbler, etc,), the frequency, the duration and the timing (morning, afternoon or evening/night) affect the outcome of our efforts to create a "perfectly" healthy landscape whether the landscape is in Stepford, Bloomfield Hills or Peyton Place. Following are a couple of examples of irrigation mismanagement that I encountered within the last week before writing this article, essentially underscoring my emphasis on and preoccupation with irrigation issues.

Irrigation Mismanagement Example #1: I recently visited an exclusive condominium site in SE Michigan to look at a tree problem. The developer and condominium HOA had invested heavily in hardscape (Photo 4A), landscaping, and irrigation. At the entrance, the irrigation system had been running for quite some time before my arrival so that much of the water was running out onto the street and down into the sewer (Photo 4B). I was at the site for about an hour; the irrigation system had been running prior to my arrival and was still running when I was leaving. I attempted to walk on the lawn and immediately sunk in, realizing it might be difficult to extricate myself from the muddy landscape mire (Photo 4C). The lawn was dying out and the ornamental pears were declining from waterlogged soils, not from Trellis Rust. Who is responsible for managing this system? Does anyone pay attention?

Irrigation Mismanagement Example #2: I was recently touring some landscape sites with an arborist who took me by a nicely manicured lawn and landscape on the shores of a lake (Photo 5A). The property owner wondered why her junipers were turning brown (Photo 5B). I immediately recognized *Phomopsis* blight on her junipers and asked about her irrigation regime, specifically whether there was a local ordinance on irrigation (some cities only allow irrigation at night when water usage by humans is low). She replied that she has unlimited water pumped from the lake and can water anytime, but usually at night. The junipers were being struck with water from both sides at night, exacerbating the requirements for attack my *Phomopsis*, a moisture-loving fungus. I explained the *Phomopsis* disease cycle to her and how the disease is favored by prolonged periods of wetness from her *overhead* sprinklers at night. Upon learning about *Phomopsis*, she planned to modify her irrigation regime, and I suggested that the arborist apply thiophanate methyl fungicide every two weeks for a couple of months until the junipers recovered (and then stop treatments). Like many other diseases, *Phomopsis* blight can be managed very well with irrigation management.

Photos 4A, 4B & 4C: At this condominium community, significant investments were made in hardscapes and plantscapes. The hardscape in Photo 4A was a significant but beautiful investment and provides a nice backdrop for photographing my mode of transportation on the day of my visit (Inset). The irrigation system was running long before I arrived and for more than an hour during my visit with water draining out onto the street and into the sewer (Photo 4B). What tree or shrub could survive these waterlogged conditions from daily irrigation (Photo 4C)?

BALING HAY

Being out in the heat of the summer looking at trees and landscape issues often reminds me of growing up on a farm where we would often be out in 90+ degrees, high humidity weather, hoisting 80-100 lb. bales of hay over our heads to stack them on a wagon or in the barn's haymow. They generally do not bale hay in the town of Stepford, but as with other urban communities, they could. Many people are so anal about their lawns that it seems that nothing else matters. Some lawns are irrigated twice daily, receive umpteen fertilizer and herbicide treatments per season and are double mowed 2 or 3 times a week to give that lovely crosshatch pattern (Photo 6). Under this regime, the turf is putting on so much growth one could literally bale it and sell it to a horse farm . . . except for all the chemicals in the clippings. Some lawns in Stepford, especially the Jones' property (as in "keeping up with the . . . "), are so lush and thick that I would just like to lay down and take a nap, or perhaps engage in some frolicking of some kind. However, we must be very careful because some property owners are very protective of their lawns

Photos 5A & 5B: This nicely landscaped property has many beautiful plants enhancing the unique architecture of the home. Unfortunately, lawn irrigation at night is predisposing the junipers to Phomopsis blight (Photo 5B). When the stems/foliage of juniper are tan/brown, the stems are usually still alive. When those stems and foliage turn gray, they are generally necrotic and will not recover. Redirecting, reducing or altering the timing of irrigation to encourage rapid drying along with some fungicide (thiophanate methyl) applications can help these plants recover to good health when careful irrigation management would no longer require pesticidal inputs.

Photo 6: This exquisitely manicured lawn is receiving abundant fertilizer, water and herbicide treatments. In such instances, frequent mowing is required to keep it looking great. Many homeowners are very protective of their lawns by not allowing foot traffic on them (Inset).

Photo 7: Who says trees cannot become obese? This self portrait was taken in Hyde Park in London, England. Nice bole, eh?

(Photo 6 Inset). Some property owners will become very hostile if they see you walking on their lawn. I recall one recent consultation regarding a tree where the property owner had maintained his lawn meticulously. When I walked on the lawn to examine the tree, the property owner proceeded to tell me that he has called all the major mail carriers/package delivery services (UPS, USPS, FedEx, Amazon, etc.) to complain about the delivery guys and gals shortcutting across his lawn to place packages on his front door step. In those instances, I do understand. But taking the hint, I kinda tiptoed off the lawn to examine the tree from a distance.

PLANT OBESITY

Many of us humans are challenged weight-wise and have trouble keeping that middle-age spread from developing, seemingly regardless of our age in current times. But in the town of Stepford, everyone is physically fit, beautiful, and forever young because the residents work out, eat healthy, have plastic surgery and

Photo 8: This street was planted on both sides with red maple for several blocks in length. Unfortunately, the architects who designed this landscape did not perform a soil test to avoid the lifelong problem of Manganese deficiency in soils with a pH above 7.0, as shown with chlorosis (yellowing) of the foliage (Inset). Mn deficiency may become so serious that branch dieback could occur.

pop pills to stay that way. And robotic wives don't require much of anything except an occasional charge of electricity, and perhaps an overhaul and a reboot. We often do not think of trees having a weight problem, but they can (Photo 7). We pump trees full of fertilizers and other chemicals and water the heck out of our landscapes where they grow. We apply inorganic fertilizers, organic fertilizers, compost tea, bone marrow, seaweed, kelp, mycorrhizae, and all sorts of other good, exotic stuff. Much of the time, we've never performed a soil test to determine what they really need (Photo 8 and Inset) and spend the balance of our careers or the tree's life, which ever ends first, trying to correct the mistakes our industry has made. Because we feed them so often (three squares a day?) and so much, they often encounter maladies analogous to diabetes in humans but more consistent with plant disorders, whether it be too succulent of growth or failure to harden off before winter, resulting in winter injury.

SIZE REALLY DOES MATTER

In Stepford, things never change; people never grow old and plants never get larger because everything remains perfect. In the real world however, where most of us live and as we age and get older, trees become larger and often outgrow the spaces from the landscape architect's original design because they are long gone (Photo 9). We often install plants hoping they will grow fast, unless a particular property owner is willing to shell out the big bucks for large, instant trees. We often install trees at property borders for screens or shade without noticing the supply wires overhead (Photo 10) . . . until we receive a notice on our door informing us that our tree will be severely pruned or removed due to interference with those electrical wires. And then we become mad.

Photo 9: A gorgeous and healthy Austrian Pine is gradually outgrowing its site as it crowds the corner of this residence. Worse yet is that the deciduous Tulip Poplar will quickly outgrow its site and shadow the Austrian Pine. Better design would have avoided these issues.

Photo 10: It is not unusual for people to plant trees and not think about their growth habit and their maturing size they may attain over the next 20-30 years.

THE CHEMIST'S PILL

If anyone has ever been to the United Kingdom, they would know that drugstores are called "Chemist". In our modern-day society, we expect to take a pill if we have an issue whether physical or mental. Several years ago, I joined the AARP crowd and am now looking for that "Fountain of Youth" pill or "elixir" in hopes of warding off that ever approaching elderly status . . . involving aches, pains and ugly wrinkles. If I want to stay in the town of Stepford I need to stay fit and youthful to keep up with my forever young beautiful wife; like many of my comrades, I'm worried that our young beautiful (robotic) wives could eventually revolt and ship all of us older curmudgeonly husbands off to the funny farm, just like they do with trees that become "messy." In my desperation I tried several of those magical products advertised on late night TV. Most have been failures at stemming the tide of encroachment of old age, but one that has shown significant

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results is called the Ponce de Leon Miracle Antiaging Cure. I have been using it for 2 months and it seems to be working! (Photos 11A & 11B). Seriously, in our present culture, we expect to pop a pill or have access to a quick fix to help us cure anything: lose weight, gain weight, prevention of hair loss, feel better after a hangover, cure our depression, help us to deal with stress, help us to sleep at night, prevent us from getting pregnant, help us to get pregnant . . . you know what I mean. We want to pop a pill to shed pounds

Photos 11A & 11B: I think most of us worry about getting old. So we try all sorts of remedies to avoid the encroachment of geriatric issues. After trying several guaranteed products "or your money back", The Ponce de Leon Miracle Antiaging Cure seems to be working for me!!

while we sleep because we don't want to eat less and exercise more. Aren't we doing essentially the same thing with landscapes and trees? We are drenching rhododendrons with a fungicide to inhibit *Phytophthora* from causing root and stem rot, because we still want to irrigate as much as possible. We are injecting trees with chemicals to ameliorate nutritional deficiencies because we planted that particular species on the wrong site without doing a soil test. We apply herbicides to maintain weed-free lawns and landscape areas while harming our trees (Photo 12). Obviously, many of us inherit issues caused by others in our profession. In our Stepford landscapes, we often want to fix things with a chemical, preferably in tablet form.

IN PRAISE OF THE REAL STEPFORD WIVES' LANDSCAPES

Now, before I receive a ton of angry letters or emails from readers of my column, "The Plant Doctor's Landscape Tip's", about how I am dismissive of those exquisite landscapes and lawns, please allow me to clarify a few things. Those highly maintained landscapes provide numerous jobs and value in our plant industry, and many professionals in our industry support their families and send their kids to college with the sources of income from the Stepford landscapes. The property owners who invest so much in their trees and landscapes deserve to expect as close to perfection as we can possibly provide for them. But biological systems are unpredictable. And many of us do not understand those complex biological systems. So, our clients' expectations of what we can reasonably provide may be unrealistic, especially when we cannot be on site 24/7, which some clients expect us to do at no extra cost (We've all encountered those clients!). And each of us has our specific responsibility to perform. My concern is that we could do a much better job of approaching perfection. Wouldn't it be great if irrigation specialists would communicate with arborists and lawncare people? How about landscape architects communicating with the arborists, nurserypersons, and product suppliers? It seems to be our human nature to be in continual conflict with Mother Nature. We want perfect rows of uniform, healthy trees (Photo 13), beautiful plantings of annuals and perennials, and lush green lawns without a single weed. I strongly suspect we could cut back by at least half of our inputs whether they be water, fertilizers or herbicides and still have lovely landscapes with fewer problems. It is my contention we can strive for perfection without following the path towards the mythical town of Stepford.

Photo 12: We are always looking for that quick fix for a problem such as a spray that will cure our weed problem. This property owner thought his trees were afflicted with Oak Wilt until I confirmed that Imazapyr herbicide applied to his landscape was the culprit. Many property owners are not aware of the dangerous Imazapyr component of Roundup 365, Ortho Ground Clear and other readily available products. The application was made in 2019 but symptoms did not appear until 2020, when many trees did not leaf-out.

Photo 13: Uniform plantings are not quite consistent with nature. These two rows of spruce trees straddling the entry into a residence will eventually meet with failure given that Spruce Decline is epidemic in Michigan at this time. But if this was in Stepford, they might remain perfect and forever young.

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