

IS ARTIFICIAL GRASS A GOOD CHOICE FOR LAWN REPLACEMENT IN HOLMBY WESTWOOD?

By Susan Reuben, Vice President, HWPOA

We're all trying (or should be) to conserve water any way we can. But, should we be replacing our lawns with artificial grass? This question is still being debated, and research by the EPA and others is still being conducted (see current facts listed below). Unfortunately, scientists don't know what the potential hazards may be when artificial grass approaches its 10-20 year life span, begins to break down, and finally enters our landfills, possibly leaching chemicals into our environment during the process.

Recently, after thorough study, HWPOA recommended drought tolerant alternatives to traditional parkway grass – Beach Strawberry, Common Yarrow, and Kurapia, a drought tolerant hybrid of Lipia (see our web site holmbwestwoodpoa.org and look under the heading *Drought in California* for the article and photos). These are all ground covers which grow in sun or part sun, can tolerate foot traffic, and are low enough to allow a passenger side car door to fully open. The committee of five did not recommend artificial grass for many of the reasons listed below.

There are now many drought tolerant grasses available (some can be mowed and look like traditional grass – google Eco-Lawn; eco-lawn.com, for example, to get information and see photos of this grass blend, which develops 14" roots, can be easily over-seeded on top of an existing lawn, and requires 75% less water than traditional grass once it is established). Should residents decide to remove their lawns partially or entirely, many local nurseries, including Armstrong's and OSH, now carry a wide variety of drought tolerant plants. Please remember that all drought tolerant plants and grasses require regular watering until established. (In our Mediterranean climate, your trees also require regular watering.)

Please do not place gravel, stones, or bark in your parkway. The City of Los Angeles does not allow these materials in parkways as they can spill onto the sidewalk and street, often becoming a hazard to passersby.

The EPA provided us with some of the facts currently available:

- Artificial grass does not support birds, insects or animals
- It can become dramatically hotter than real grass (up to 157 degrees F)
- As it heats, it can stick to shoes, skin and clothing
- There is current controversy regarding potential cancer risks.
- The 87 page Toronto Public Health study and report (April, 2015) (www.toronto.ca/health) states:
 - Artificial grass creates a significant increase in surface temperatures, substantially increasing air temperatures and potentially contributes to an “urban heat island effect” in the surrounding neighborhood. This contributes to an increased health risk during hot weather, especially to young children
 - It increases storm water run-off which contributes to water quality concerns
 - More research is needed to assess a potential impact on the health of aquatic ecosystems from the release of zinc and a few other substances found in artificial grass
 - Natural grass serves as important “carbon sinks”, removing carbon dioxide from the atmosphere
 - Artificial grass releases carbon dioxide into the atmosphere during manufacturing, transportation, installation, maintenance, and end-of-life disposal stages
 - Artificial grass may increase the risk of skin abrasions, which can lead to infection (blisters and burns), especially during hot weather
 - Artificial grass lacks the natural biodegrading properties of natural surfaces, making it more susceptible to unsanitary conditions for users
 - Natural surfaces are important features of an urban landscape – they have evaporative cooling properties which cool the air, absorb rain, remove carbon dioxide from the air, and contribute to increased resilience during extreme weather events (climate change) and reduce the risk of heat-related health impacts

- Available evidence does not indicate that artificial grass exposure to contaminants are at levels that pose a significant risk to human health, provided it is properly installed and maintained using common sense hygiene policies – washing one’s hands, avoiding eating on the turf, removing dust from shoes and clothing before going inside
- *The Huffington Post* (June, 2015) states :
 - as artificial grass heats up, some toxic chemicals such as benzothiazole and toluene can be released into the air
 - It has the potential to leach toxins into the earth and pollute our environment with toxins such as polycyclic aromatic hydrocarbons, phthalates, arsenic, cadmium, chromium, and lead
 - The off-gassing chemicals may have carcinogenic, repro-toxic, mutagenic and endocrine disrupting effects
 - Toxic run-off can potentially drain into the ocean
 - Most cancers require years of exposure and time to develop; adverse effects may not be seen for 10-20 years

Please consider all the alternatives before choosing artificial grass. While it does save water, we may not know for many years what its long-term effects may be on our health and our environment.