should be warned of the serious nature of possible adverse effects on dogs when phenoxy chemicals are used on their home turf.

For thousands of years, the company of dogs has alleviated our isolation, loneliness and physical hardship. Now we see that through their suffering, they serve as monitors of chemical contaminants in our immediate environment — "However, one could ask, 'Who is listening?'" *(Beasley, V.R.)*. Regulatory officials and manufacturers need to take into account

Regulatory officials and manufacturers need to take into account the observations from pet owners on illness associated with chemicals.

the observations from pet owners on illness associated with chemicals. **They should provide suitable warnings on pesticide product labels.** Pet owners for their part can help by becoming more aware of the toxic nature of various pesticides and learning of the availability of low risk methods and better products that serve as alternatives to such chemicals. Knowledgeable owners can seek out health care professionals and others familiar with pesticide problems and alternative pest control methods. **Rachel Carson Council can provide resources for both groups.**

MAKE THEIR PLAY SPACE A SAFE SPACE

Rachel Carson reading to her dog "Candy," Springdale, PA

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SNOOPY only lands on Toxic-Free Lawns!

Make sure YOUR yard
is Chemical Pesticide-Free
for the safety of yourself,
your children and your pets!

A MESSAGE FOR PARENTS AND PET OWNERS

WHERE LAWNS ARE CONCERNED, PARENTS AND PET OWNERS HAVE COMMON INTERESTS

Both parents and pet owner want to protect the precious lives in their care and provide safe places for play.

No one should have to worry about possible adverse effects of toxic chemicals on grass used for exercise and fun. Yet very young children and pets can be particularly at risk from encounters with certain lawn care pesticides. Both populations lack the knowledge to avoid turf that has been sprayed or to understand posted warning signs. In certain instances very young children and pets lack the biological mechanisms to effectively break down these synthetic chemicals after they enter the body. Children are at greater risk of pesticide exposure than adults because pound for pound of body weight, children not only eat more and breathe more, but they also have a more rapid metabolism than adults and they play on the lawn, where pesticides are commonly applied.

In April 2004, Canada's **Ontario College of Family Physicians** warned about the use of pesticides by homeowners. Due to the associations they had found between exposure to pesticides and the occurrence of fetal defects, neurological damage and cancer, the doctors urged avoidance of these chemicals in any form.

Although these physicians were focused on protecting humans, pets can benefit as well when chemical pesticides no longer contaminate their environment.

ORGANIC LAWN CARE

Increasingly, people who care about health are turning to organic lawn management - and are urging their communities to do likewise. Chip Osborne, who helped create the "Organic Pest Management Policy for Turf and Landscape" in Marblehead, MA, stated: ***"No one would willingly harm...pets... by the use of pesticide products, but the fact remains they are dangerous to both our pets and ourselves."*** After losing to cancer both canine companions with whom he had shared his then nonorganic workspace, Osborne researched the hazards of chemical pesticides. He then shifted his horticulture business to organic only.

As Marblehead and other localities have found, lawns under organic management can be attractive healthy and vigorous — as well as safe for people, pets and the environment.

Corn gluten products can significantly reduce populations of crabgrass and other weeds. Seeding with a mixture of grass types will help keep a lawn healthy under various climactic conditions. Adjusting the lawn mower's cutting height to 3 inches can help shade-out weeds. The goal should be a dense lawn mowed high. Removing individual plants by hand using a special tool can help eliminate dandelions. Nematodes that prey on the immature insects can be used against grubs in the lawn.

WHAT MAKES SOME CHEMICALLY TREATED LAWNS ESPECIALLY DANGEROUS FOR PETS?

Snoopy and his fellow dogs, like miners' canaries, are sensitive to some pest control products commonly used around the home and yard. When it comes to risks posed by certain lawn care chemicals, dogs exhibit a degree of vulnerability that even responsible, caring owners may not realize. A few examples follow.

IMMEDIATE TOXICITY: Dogs have developed: anorexia, loose stools, vomiting, ataxia and incoordination, hypersalivation, and tremors after exposure to phenoxy herbicide-treated lawns. The Animal Poison Control Center *(APCC)* received approximately 100 calls during the late 1980s on adverse effects in dogs associated with the phenoxy herbicide 2,4-D. *(Beasley, V.R. & H. Trammel)* In addition to the signs noted above, muscle weakness and myotonia (muscle stiffness of the hind legs) have also been noted in 2,4D poisoned dogs. *(Osweiler, G.D. et al.)* Rachel Carson Council continues to receive reports of ill effects in dogs after exposure to various lawn pesticides.

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> *Rachel Carson Council continues to receive reports of ill effects in dogs after exposure to various lawn pesticides.*

In humans, symptoms of 2,4-D poisoning can be coughing, burning, dizziness, temporary loss of muscle coordination, fatigue, and weakness with or without nausea. *(Kamrin, M.A.)*

CANCER: Two canine cancers have been associated with chemical herbicides: cancer of the urinary bladder in Scottish Terriers (Glickman, L.T., et al.) and canine malignant lymphoma in various breeds (Hayes, H., et al.). In people 2,4-D has been associated with non-Hodgkins lymphoma *(Zahm, S.H. & A. Blair,)*. Laboratory rodents were found to have higher rates of brain cancer after exposure to high levels of 2,4D *(Aug. 31, 2000, EPA OP Memo)*.

CASE REPORT: A young female labrador, apparently in good health was allowed access to the family's yard shortly after it had been sprayed with a mixture containing several phenoxy herbicides, including 2,4-D, dicamba and MCPP. As the weather was hot, she rolled in the treated grass, was soaking wet and was observed to be licking her coat upon returning indoors. Several days later, she began vomiting and refused to eat or drink. Her condition deteriorated, and she was diagnosed with kidney failure two weeks after her initial exposure to the herbicide-treated turf. Residues of phenoxy chemicals were found in kidney tissue removed at necropsy. Veterinary pathologists at the Armed Forces Institute of Pathology *(AFIP)* concluded that the dog's acute renal failure could have been associated with the phenoxy herbicide exposure (pers. com.). It must be acknowledged that allowing pets access to grass freshly treated with pesticides is contrary to most lawn company instructions. However, it appears in this case, that the margin of safety when directions are not followed could be so very slim as to produce fatal results. Pet owners