

Each year, American homeowners use approximately 70 million pounds of pesticides to maintain their lawns, mostly for aesthetic purposes. Yet as the use of these chemicals continues to grow, researchers continue to uncover the links between pesticide exposures and serious human health problems, including several types of cancer, neurological and reproductive disorders and birth defects.

Regulations concerning the marketing and use of these potentially harmful products do little to protect consumers. Every pesticide on the market carries an EPA registration number, but this only means that the active ingredients are listed and instructions for its use are given, including warnings of acute health effects. Warnings about potential long-term or chronic health effects from the active ingredients are not required.

#### Some Common Lawn Pest Problems and Solutions

<b>Problem</b> White grubs, sod webworms, chinch bugs, etc.	Chemical Solutions insecticide application (ex: Merit, Dylox, Talstar, Acephate)	Safe, Alternative Solutions apply beneficial nematodes, watering lawn before and after application
Japanese beetle grubs	insecticide application (ex: Merit, Orthene, Dylox)	apply Milky Spore powder-can provide years of protection
(ex: Trimec, Trimec	herbicide application (ex: Trimec, Trimec Super, Balan, Tupersan, 2,4-D	using a spreader, apply a corn gluten product each spring to control crab grass and dandelions
	products)	pull weeds by hand for large patches in lawn and fill bare spots with compost and grass seed
Fungal turf diseases	fungicide application (Ex: Daconil, Bayleton, Banner, Compass)	Spread compost or "compost tea" on affected areas

### Chemical Close Up

2,4-D is a toxic pesticide found in many consumer "weed and feed" products. Many people don't realize that 2,4-D was one of two chemicals which made up the widely used defoliant Agent Orange. In addition to the growing evidence of 2,4-D's potential harm to humans, the National Cancer Institute released a study showing that dogs whose owners treated their lawns with 2,4-D four or more times per year were twice as likely to contract canine lymphoma (cancer).\*

## 2,4-D

For homeowners who want to control crab grass and other weeds, **corn gluten** is an effective and safe substitute for **2**, **4-D**. Corn gluten is a by-product of corn syrup production and is safe for use around children and animals and has no known adverse health effects.

\* "Case-Controlled Study of Canine Malignant Lymphoma: Positive Association with Dog Owner's Use of 2,4-Dichlorophenoxyacetic Acid Herbicides." Journal of the National Cancer Institute, Vol 83 No. 17 September, 1991. "Pesticides pose health risks, even when used and applied in full compliance with manufacturers' recommendations and legal requirements."

Eliot Spitzer New York State Attorney General



# Pesticides and Children

Children are especially vulnerable to environmental toxins, including pesticides. Their normal activities include playing on floors and on grass where pesticides accumulate, and they routinely put unwashed hands or other objects in their mouths. In addition, their nervous, respiratory, reproductive and immune systems are not yet fully developed, and as they take in more toxins pound for pound than do adults, these crucial developmental processes may be adversely affected.

Dr. Philip Landrigan, pediatrician and Director of the Center for Children's Health and the Environment, Mount Sinai School of Medicine says *"Every day of every week we are continuing in this country to expose children to chemicals whose toxicity is simply not known. As a pediatrician, I urge parents to think carefully about the choices they make, especially about pesticides."* 



"Each year, we dump tens of millions of pounds of fertilizers and pesticides on our own backyards, thus poisoning birds and wildlife while creating one of the largest sources of pollution runoff in our lakes and streams."

John Flicker, President National Audubon Society



# Pesticides and Wildlife

The use of lawn pesticides by homeowners accounts for the majority of wildlife poisonings reported to the EPA each year. Birds are particularly vulnerable, as they feed on the ground and often mistake pesticide granules for food. It is estimated that approximately 7 million wild birds are killed each year due to the aesthetic use of pesticides by homeowners.

Pesticides are also routinely used to control weeds and vegetation along roadsides and borders which are used by wildlife as habitats for nesting and raising their young. When a bird or small mammal is sickened by pesticides, they neglect their young, abandon their nests and become more susceptible to disease and predators.

Wildlife specialists are becoming increasingly alarmed by the presence of pesticides in lakes, rivers and streams which are essential food and water sources for so many species. A recent study by the U.S. Geological Survey (USGS) found at least two pesticides in every stream sample and one or more pesticides in every fish sample. Even minute amounts of the chemicals that make up these pesticides have been shown to have a profound effect on the reproductive viability of aquatic life. The most common pesticides found were those typically used for lawn treatments.

#### SUGGESTED READING

The Chemical Free Lawn by Warren Schultz. Rodale Press.

Redesigning the American Lawn - A Search for Environmental Harmony by Borman, Blamori & Geballe. Yale University Press.

Gardener's Guide to Common Sense Pest Control by William Olkowski, Sheila Daar, Helga Olkowski. Taunton Press.

Edaphos: Dynamics of a Natural Soil System and Handbook of Successful Ecological Lawn Care by Paul Sachs. Edaphic Press.

Building a Healthy Lawn: A Safe and Natural Approach by Stuart Franklin. Storey Communications.

Tiny Game Hunting: Environmentally Healthy Ways to Trap and Kill the Pests in Your House and Garden by Hillary Dole Klein, Adrian M. Wenner & Courtlandt Johnson. University of California Press.

For information on safe lawn care and non-toxic alternatives go to www.grassrootsinfo.org

Supporting organizations include: "Audubon • www.audubon.org

CCE (Citizens Campaign for the Environment) • www.citizenscampaign.org • 516-390-7150 CHEC (Children's Health Environmental Coalition) • www.checnet.org • 609-252-1915 NCAMP/Beyond Pesticides • www.beyondpesticides.org • 202-543-5450



### Websites to Visit for Pesticide Info

NCAP www.pesticide.org

Click on "Publications and Information" and go to desired link

#### NCAMP/Beyond Pesticides www.beyondpesticides.org

Click on "Info Services" and select choice from pulldown menu

#### PANNA

#### www.pesticideinfo.org

Click on "Open Database" button and enter pesticide name in "Search" box under #2

Audubon at Home www.audubon.org/bird/at\_home/