BEYOND

The Threat of Toxics

A Road to Paradise Soaked with Poisons

e said the stuff he was using was safe enough to drink,"
Denare Axell recalled.
"I should have asked him right then and there to prove it."

Denare, a nurse, had found her piece of paradise in the high desert near La Pine, Oregon.

Tall Ponderosa pines guarded her small two-bedroom home. She planted plum, pear and apple trees, and a vegetable garden about the property to help feed her family. A row of roses went in along the front fence. She purchased native plants for an ornamental garden. Small rhododendrons and azaleas adorned her 2-acre lot. This was her home, the place where she and her family enjoyed raising their chickens and St. Bernard dogs.

In the summer of 2010, Denare was working in her yard when she heard the truck moving slowly down the road along her fence line. She walked to the end of her driveway and saw a Klamath County truck spraying a liquid along her property line. When she asked what it was, Denare was told that the county was spraying chemicals for weeds.

Within weeks, Denare's roses began to shrivel. The fur on her 150 pound St. Bernard came off in great fistfuls and within a month the dog stopped eating and died. Then the chickens started dying. A year later, not a single fruit tree remains. The grass didn't only die, there's no longer a trace that it ever existed. Only one lonely, brown, stunted rhododendron is stubbornly holding on in what now looks like a barren wasteland.

by Lisa Arkin, Executive Director of Beyond Toxics Photography by Douglas McGowan



A Road to Paradise Soaked with Poisons CONTINUED

It turns out that the "stuff" that was sprayed from the government truck was Outpost 22K, which is 24% picloram, an herbicide whose use is restricted. According to Dow Chemical, the manufacturer, "it is known to leach through soils into ground water, and may result in ground water contamination."

INVESTIGATION REVEALS POISONING

That was in 2010. Since then, many La Pine neighbors reported similar problems. The Oregon Department of Agriculture started an investigation in November 2011. Despite taking soil, drinking water and foliage samples a full 16 months after the spray occurred, picloram was found at unusually high levels on a number of residential properties. The sandy pumice soil of Central Oregon is the primary aquifer in the La Pine area, and most domestic wells are within 50 feet of the surface. This aquifer serves as the sole source of drinking water for these residents.

Giant trees — many over 250 years-old — are withering away. Over 100 lodgepole and Ponderosa pines perished on a single property. New plantings grow in crooked shapes, or just can't survive. For a year after the spray, children suffered from incessant nosebleeds and nausea. And people continue to feel sick. Adults still experience metabolic disorders, memory loss and muscle weakness.

Amazingly, this devastation occurred because Klamath County government, using public money, sprayed toxics to kill just one unwelcomed plant: spotted knapweed. In fact, the investigation determined Klamath County Public Works and their pesticide contractor were guilty of violating federal pesticide laws. Each was fined over \$7,000, a trivial sum given the consequences to the community. Both are appealing the fine. However, the state's investigative report notes, "Impacts from pesticide contamination to water have long been of particular concern to natural resource stewards and society in general...with its implications for potential human health impacts."

THE SITUATION TODAY

Two and a half years later, these Oregonians are still suffering. With permeable pumice soils and shallow groundwater wells, there is constant concern that picloram will continue to move through the aquifer

Denare's surviving dogs continue to lose weight and shed clumps of fur.

to poison drinking water. Many of the families in this area are either lower-middle class, retirees, or veterans struggling with ongoing health issues. Being forced to buy bottled water is a hardship.

With little money to spare, residents have had to assume all of the costs of tree and soil removal, water supplies, and medical care.

Tears well up in Denare's eyes as she looks at the yard that was once a lush garden. She thinks about the dead dog and the chickens, but mostly about her three-year old grandson. She wonders what chemical burden his small body might be carrying. She also worries about her daughter, who is five months pregnant with a second grandchild and lives with her. And she worries about her neighbors. "They confided in me because I'm a nurse. Their symptoms were eerily similar: the nosebleeds, coughs, colds and flus that never seemed to go away."

Shamefully, Klamath County remains unresponsive weed eradication. For example, two-and-a-half to the plight of area residents. Last summer the community reached out to Beyond Toxics for help.

Beyond Toxics' staff traveled to northern Klamath County in September to document the scope of the situation and witness the damage first-hand.

Dan Harshbarger, a veteran of the Vietnam War, gave us a tour. Dan told me that many Vietnam vets experienced the effects of picloram when the U.S. military sprayed the jungles with Agent White along with Agent Orange and other forest defoliants. (Agent White is a 4:1 mixture of 2,4-D and picloram.) When picloram was found in the soil and well water on Dan's property, he called it "chemical trespass" because the herbicide that was sprayed along the edge of his property traveled through the sandy soil directly to the roots of his trees and into his well. He was forced to cut down dozens of dying, mature trees and burn them in huge mounds. This year, he planted a vegetable garden but can't help wondering if eating the produce is safe.

He is emphatic when he says, "We must prevent this kind of recklessness from ever happening again. Endangering the general public is not acceptable ... for any reason."

unsettling enough to see these towering trees www.BeyondToxics.org.

die one by one, but how are these chemicals affecting the health of my children? We drank the contaminated well water for almost a year before it was tested and found to have picloram in it. If there were symptoms of pesticide poisoning so soon after the spray, what about the long-term effects?"

OUR FINDINGS

Our own investigation uncovered that state and federal grant funding was used to pay for the Klamath County spray operation under the Oregon Department of Agriculture's noxious weed program. There are numerous sources of funding for

million dollars were allocated to weed eradication projects in the 2009-2011 biennium. The majority of these projects rely on herbicides like picloram, and \$2.5 million buys a lot of poison.

The poisoning near La Pine took place over 7 days at a cost of over \$8,000, which included \$677 per day for two workers, hazardous chemicals, and transportation. Roughly the same amount of money could have been used to hire five restoration workers at \$15/hour/day to pull the weeds. More iobs, zero toxics.

There is a problem when the state authorizes grant money to spray carcinogens around people's front yards in a manner that violates the law. Beyond Toxics has a solution, starting with a state policy which would protect people and the environment as the first priority.

We recommend instituting an integrated pest management plan, which affirms "pesticides as the last resort." We call it the Safe Public Places Act, and we intend to introduce it in the 2013 legislative session. If Safe Public Places had been the law, Denare's home, family, her dog, her chickens, and her neighbors wouldn't have been poisoned.

Jennifer Meinike, a mother of two, told us, "It's See the video by Douglas McGowan starting December 13th:



of the trees on his property after excess pesticide spraying killed them

You Can Do Your Part

There are three ways to get involved:

1) Go to: www.SafePublicPlaces.org to sign our *Safe Public Places Endorsement Form* to join the statewide momentum. We need you on the team!



2) Please join our campaign for sensible pesticide reduction laws by becoming a member.

3) We're collecting pesticide exposure stories to present to the Oregon State Legislature. You can help by calling or writing to us.

Won't you join us in imagining and working for a world Beyond Toxics?

Please get involved! We need your membership and your voice to be an effective advocate for change in

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Beyond Toxics is a 501(c)(3) non-profit organization

Beyond Toxics Mission

Beyond Toxics works to guarantee environmental protections and health for all communities. We challenge causes of toxic pollution and help communities find effective, lasting solutions.





by Lisa Arkin, Beyond Toxics Executive Director

hey fell out of the sky like grisly hail until the ground was cloaked in a shroud of yellow and black. They kept falling, wounded beyond repair, unable to fly, paralyzed by something in their midst. They fell not by the But beyond farming applications, neonics are hundreds, or even the thousands, but by the hundreds of thousands. No one knows exactly how many bees died that day, but a conservative estimate places the number at over 7 million.

They died on Jim Doan's land, but not by his hand. Doan runs a bee farm, and last year 145 of his hives collapsed. He had tended those hives with skill, offering care and shelter in return for honey. But now millions of the bees were dead, and while mass die-offs are not unheard of in nature, Doan suspected other sources.

He took a sampling of dead bees, along with honey from the hives, and submitted them for toxicological testing. The results found high concentrations of clothianidan, a pesticide in the Neonicotinoid class. Neonicotinoids, or "neonics" for short, are poisons used in the industrial farming of corn and cotton. They are also used on lawns, rose bushes, and other ornamental insect. Doan didn't have to look further than the corn field planted adjacent to his property. Neonics, the pesticide of choice used in the planting, had drifted onto his property.

The bees died for corn.

BLASTING POISONS INTO A BEE'S WORLD

The corn seeds were impregnated with clothianidan before they were even planted. Once saturated with the pesticide, the seeds are loaded into a machine that shoots them into the ground under intense air pressure. The soil disturbance and the agitation of the seeds chafing against each other create a cloud of insecticide residue dust. It migrates on the breeze and settles onto meadows and fields where it contaminates the pollen and nectar consumed by pollinators such as bees and butterflies. If the concentration is high enough, the poison does what it was designed to do. It quickly kills the insect. Lesser amounts may kill over time as the pesticide contaminates the hive and the honey and pollen inside.

Neonics loiter in the environment. According to the EPA, they can persist in soil for as long as three years, during which time fresh generations of untreated plants absorb the chemical residue lingering in the soil.

also marketed to unsuspecting homeowners. Local stores sell them for use in gardens and lawns. (Our website has the names of common home garden products to avoid which contain neonics.)

Local Lane County beekeepers are so concerned that they plan to circulate a plea to homeowners and local retailers asking them to shun any gardening chemicals with neonicotinoids. A joint project with Beyond Toxics, "Healthy Gardens Equal Healthy Bees" encourages neighborhoods, block by block, to pledge to be pesticide free. In return, beekeepers promise fresh, healthy honey harvested from neighboring hives.

The bee die-off is not confined to the United States, According to a recent National Academy of Sciences report, we are seeing a global collapse of honey bee and native bumblebee populations. Concerns have led to partial bans plants. In fact, neonics, are some of the most on the use of some neonicotinoids for specific widely used insecticides in the world. They kill crops in several European countries, including by attacking the central nervous system of the France, Germany, and Italy. But such bans, while welcome, are always partial, inadequate, and late, preceded by the death of millions of bees.

ARE WE TAKING BEES FOR GRANTED?

We consider pollination services to be free and. in the natural scheme of things, they are. Much of our agriculture depends on what bees have been doing, without help or interference, for millions of years. But, if we insist on overriding nature, we must do our part to keep bees and their hives healthy by decreasing the use of poisons upon the land. If bees disappear, a chain of events would be set in motion leading to plant extinctions, crop failures, and famine.

Before picking up a can of "Bug-Be-Gone" consider that you might just get what you wish for. Besides exercising personal accountability, what can be done to protect these delicate pollinators? We need public policy based on the precautionary principle, "when in doubt, do no harm."The fate of bees and humans is inextricably linked. As bees go, so do we.

For more background on the issue of pesticides and the plight of our honey bees, see our web site: www.FriendsOfHealthyBees.org

Safe Public Places

s the stories that appear here make plain, pesticides are a public and environmental health problem, linked to tragic disease and environmental damage. That's why, in 2009, Beyond Toxics spearheaded the Oregon law to reduce toxic pesticides at all Oregon schools.

We feel the State of Oregon should do the same for all public places. If the schools can do it, so can state agencies.

Our state has a responsibility to reduce pesticide use to protect our health, preserve the environment and ensure our rivers support salmon and provide safe drinking water.