

Subject: [Fwd: Vancouver Sun article - Pesticides permeate streams]

Date: Thu, 22 Dec 2005 12:04:27 -0800

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----- Original Message -----

Subject: Vancouver Sun article - Pesticides permeate streams

Date: Thu, 22 Dec 2005 11:21:27 -0800

From: M E Craver <mecraver@shaw.ca>

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CC: Mayor and Council - DNV <Council@dnv.org>

The following article in today's Vancouver Sun speaks volumes on why chemical pesticide use should be considered harmful.

The fact that a mixture of different pesticides are being found in our waterways (and every chemist knows a combination of elements always forms into something else) is reason enough to ban cosmetic use of pesticides in residential areas, parks, golf courses, and in the long term -- agriculture (many are turning to organic farming). Studies on the effects pesticides are in their infancy, but there is enough evidence pointing that use of these chemicals, emulsifiers and their resulting combinations are detrimental to fish and wildlife.

What are the real long-term effects of cosmetic pesticide use on residential lawns bordering our many streams and creeks on the North Shore? It washes down into our strait and ocean. It doesn't take a chemist to understand that two or more chemicals mixed together form another -- some we know, and many combinations are yet unknown -- namely, the pesticide soup in our waterways combined with their emulsifiers.

Shouldn't we play it safe and say "NO" to cosmetic pesticide use, as it is clear pesticide studies are leaning toward "harmful" rather than "beneficial" in more ways we do not yet understand. **I strongly believe chemical pesticide use should be considered "guilty" until proven "innocent"--- not the other way around.** For our health, the health of our environment, etc. Thank you.

--Monica Craver--

Pesticides permeate streams

A fisheries study found 39 different pesticides at one location on Musqueam Creek

Larry Pynn
Vancouver Sun

Thursday, December 22, 2005

Streams in the Lower Mainland are laced with so many pesticides that scientists want to know if they are disrupting the ability of salmon to return to their spawning grounds.

A federal fisheries study has found 39 different pesticides at a sampling site on Musqueam Creek, the last salmon-bearing stream in Vancouver, which runs through two golf courses and an aboriginal reserve.

In agricultural Langley township in the Fraser Valley, researchers found 45 types of pesticides (including insecticides and fungicides) at a site on salmon-bearing Nathan Creek.

<>Researchers had been selectively looking for traces of 86 pesticides commonly used in agriculture, forestry and for cosmetic reasons including on residential properties.

"We are finding pesticides at levels that are a concern," confirmed research scientist Peter Ross, describing the levels found to date as low to moderate.

A separate study headed by Taina Tuominen, head of the aquatic science section of Environment Canada in B.C., found evidence of more than 70 pesticides or their products as they break down at concentrations of up to 81 parts per trillion in 14 waterways in the lower Fraser Valley.

Most commonly found were diazinon, atrazine, linuron, metolachlor, methoprene and simazine.

Ross said from his office at the Institute of Ocean Sciences in Sidney that the concentrations of each pesticide may not be enough to directly kill fish but the impact may be enough to harm them in more subtle, unknown ways.

A complementary study at Simon Fraser University will seek to discover whether the levels of pesticides being found in local creeks are enough to disrupt the olfactory system of salmon and their ability to find their spawning streams or to successfully spawn.

"Smell is absolutely critical to salmon," Ross said. "It's what gets them home after several years at sea. It's key to the whole success of the tremendous salmon life cycle."

He said the research on pesticides in streams is just another link in the puzzle of pollutants that are negatively impacting marine mammals in the Strait of Georgia.

Research has already shown that the endangered population of resident killer whales in the strait have the highest levels of polychlorinated biphenyls (PCBs) of any marine mammal in the world.

The average harbour seal pup in Puget Sound contains PCB levels of 18 parts per million compared with 2.5 ppm for harbour seal pups in the Strait of Georgia, and 150 ppm for an average male southern-resident killer whale, which shares both waters.

"They're pretty much the most contaminated animals on the planet," said Ross.

Ninety-two per cent of the diet of the southern resident whales is salmon, two-thirds of which is chinook, Ross said. The whales live in local waters between May and October.

Ross said he wants to know the importance of local contamination to the killer whales versus offshore source of pollutants, perhaps from Asia, the salmon have picked up in the ocean.

"How important is our chemical footprint versus the global village we live in?" he asks.

Pesticides (286 are registered for use in B.C.) tend not to have long lifespans such as PCBs but may be exacting an environmental toll of their own. The pesticides might break down into new forms that are more harmful than in their original form, Ross said.

"**Any pesticide is toxic.** To predict how a given pesticide is going to affect all the hundreds of different species of plants and animals in the Strait of Georgia is very difficult."

Ross noted that pesticides are typically in powder form and mixed with emulsions prior to distribution, and some of these emulsions are known to disrupt the endocrine or hormonal system of lifeforms. "They may be far more toxic than the pesticides," he said.

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