

# Organic Land Care *with*

**"The care of the Earth is our most ancient and most worthy, and after all our most pleasing responsibility. To cherish what remains of it and to foster its renewal is our only hope."**

Wendell Berry

**Remaining silent about the destruction of nature is an endorsement of that destruction.**

Edward Abbey



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#### **Our Mission:**

"To support our communities in their transition to organic practices"

This newsletter is distributed free of charge to all SOUL members. Please feel free to share this publication.

#### **SOUL**

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To find an organic land care professional in your area please visit the SOUL website at:  
**www.organiclandcare.org.**

Welcome to the November issue of the SOUL Newsletter. Due to some technical glitches on my part, the newsletter is coming later. My apologies as I will work on getting my end of the process smoothed out.

November has been a busy time for SOUL. I want to welcome and acknowledge the 32 new members who successfully completed the Organic Master Gardener course in Victoria and Vancouver. Congratulations! As well, SOUL was represented throughout the process leading up to the recent vote on banning pesticides in Victoria. Because of the influence of many groups, the proposed bylaw will apparently be passed in January 2008. As part of the process to intervene and influence the municipal politicians and bureaucrats, Gaia College and SOUL made joint submissions the Roundtable on the Environment (Capital Regional District) and the President of SOUL, Dayle Cosway, wrote an excellent letter to Victoria's mayor and council outlining our position on the use of pesticides in Victoria.

For those people who live in Victoria, please mark your calendars for December 12, 2007, as it is the year end pot luck social for SOUL. Please refer to the SOUL website at <http://www.organiclandcare.org/home/calendar.php> for the address and time of this event.

Thank you, and I will talk to you in December

David Greig

## Frog deformities blamed on farm and ranch runoff

Reuters, Mon Sep 24, 2007 5:30pm EDT

by Will Dunhan

The Reuters' news agency reported that "horrific" deformities in frogs exposed to nitrogen and phosphorus from fertilizers and animal wastes were a result of runoff from farms and ranches. Apparently, this runoff dramatically changed the aquatic ecosystem and enabled a type of parasitic flatworm to grow and which then caused deformities on the North American frogs.

Amphibians throughout the world are declining and malformations of these animals are being seen. Little understanding and few studies have been conducted to explain these effects on amphibians. Recent parasitic infections have been blamed for the deformities in some types of amphibians. The Wisconsin study reported on by Reuters suggested that it was the "runoff from farms and livestock ranches [that] drives the process."

The study by Pieter Johnson, an ecologist and evolutionary biologist at the University of Colorado at Boulder reported that the runoff of "nutrients stimulate the growth of algae which increases the population of snails." Trematodes, microscopic parasitic worms, then infected the snails and this cycle escalates the proliferation of snails and then worms.

The worms reproduce inside the snail and thousands of offspring are expelled. The worms then swarm over tadpoles and burrow into areas where the limbs are developing causing "developmental deformities." Predators such as birds then eat the infected frogs, which are easy prey, and after digestion, the worm is then defecated back into the ecosystem. In this way the life cycle of the worm is perpetuated.

Peiter Johnson's study looked into the role of nitrogen and phosphorus runoff in 36 ponds in Wisconsin. These nutrients were added to the ponds stocked with snails and frog tadpoles. Johnson found that the added nutrients greatly increased the "snail population, parasitic worm egg production and infection rate of the frogs".

It is interesting that this article comes at a time when pesticide use in Victoria, BC, is being debated. As Johnson suggested "an important area of research is tracking connections between nutrient runoff from all kinds of sources into aquatic environments, and the emergence of disease in people and wildlife." Although pesticides are not nutrient, it seems that similar studies could be conducted on the use of pesticides and how these runoffs also affect aquatic environments.



SOUL members who are interested in writing their Certification Exam in Vancouver, a date is being planned for a time in January.

For those members in the greater Victoria area, please make an application, so that a time can be planned. To make application for the exam, please refer to the website at <http://www.organiclandcare.org/certification/index.php> for more detail about this procedure.