



# ECONEWS



scan with your smartphone

Issue 224

Promoting the Vision of a Vibrant Sustainable Vancouver Island

MAY 2012

## THE NEW FARMING REVOLUTION

Farmers hold hands – you have everything to gain from an amazing future even if it’s also a turbulent one, due to the floods, droughts and storms that global warming will bring.

We are familiar with the long litany of problems that are being caused by conventional farming, which at its worst strips the life off the land and replaces it with a chemical cream that leaves little for nature, little for the body, and nothing for the heart.

In the long history of farming today’s practices will hopefully be seen as a wrong turning which ended with the fifth agricultural revolution.

The first revolution was the invention of farming by our neolithic ancestors, with their hand selected seeds and digging sticks, causing soil erosion that triggered the collapse of many a civilization from Mesopotamia, Greece and Rome to the Mayans.

The second farming revolution developed independently in China and in Europe, where medieval monasteries built flourishing farms using waterwheels, crop rotation, and mold-board ploughs to turn the heavier soils.

The industrial age brought the third revolution, with its steam tractors, seed drills, hybrid seeds and other improvements.

The fourth revolution followed with oil, chemical fertilizers, pesticides, and factory farming, bringing obesity and water pollution, global warming and the loss of biodiversity. The use of artificial fertilizers has certainly boosted yields, but at the price of healthy soil – and without healthy soil there can be no healthy food.

So what is the fifth agricultural revolution, that might restore the land, return the beauty and biodiversity, and feed the world’s growing population with the nutrient-rich food we need to be healthy?

Whatever it is, it will involve enormous change not only on the land, but also in the corporate network that controls conventional farming, and in

the hearts and stomachs of the world’s people, who need real food instead of the nutrient-deprived stuff that pretends to be food and is doing us such harm.



The new farming will be organic, abandoning chemical fertilizers and pesticides for traditional practices that restore the soil, using worms, compost, crop rotation and cover crops. As the soil is restored, the minerals and phytonutrients we need to enjoy a healthy life will be restored to our food.

A worldwide shift to organic farming will bring an overall increase in both yields and profits, a fact that farmers may ponder as they contemplate their debts, and wonder why they have higher rates of leukemia and certain other cancers than others do.

It will also be agro-ecological, with agroforests, trees, hedgerows, and zero-till farming to bring biodiversity back to the landscape and the soil. Worldwide, this kind of farming produces an average 79% increase in yields, according to a study of 286 projects in 57 developing countries.

The new farming revolution will be polycultural, growing different crops in close proximity to maximize their symbiotic benefits. It will also apply much more labour to the land, instead

of the heavy, oil-intensive tractors and machinery.

The oil will soon be gone. This is the uncomfortable truth all farmers must face. Electric tractors are possible, but they have an even heavier impact on the soil, due to the weight of the battery.

A return to horses may be realistic, given the many benefits they bring, from their minimal footprint on the soil to their worm-loved manure. That may seem strange when you compare the 15,000 horsepower of the upper image with the 2 horsepower of the lower, but those machines all require oil, and the crops they harvest contain fewer and fewer nutrients.

With more labour will come higher yields as more care is applied to the myriad details of food production, and with the return of the farm workers will come the restoration of rural culture with new farm villages, refilled local schools, and a new celebration of all things agricultural and green.

How can we speed this new farming revolution? From below, we need to demand ever more local organic food, encourage our farmers to produce it, and give thanks to those who do.

From above, if governments were to analyze the true cost of conventional farming they might be appalled, including the healthcare costs of immune system deficiencies related to the lack of nutrients in our food.

In response, they could tax chemical farm inputs, using the income to help farmers make the transition to organic, agro-ecological farming.

To move with the times, organic status might be upgraded to a five-star system, with one star for no chemical inputs, a second star for compassionate animal husbandry, a third for active soil restoration, a fourth for agro-ecological practices, and a fifth for fair trade and fair wages.

The current system is failing us; we need the new farming revolution, now.

*Guy Dauncey, with help from  
Carolyn Herriot*