

Fall 2006 Issue

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Just Picked

Newsletter of the
Upper Midwest Organic
Tree Fruit Network

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www.mosesorganic.org/treefruit/intro.htm

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Welcome to the Fall 2006 Issue!

The main purpose of our Network is to network; that is, to share information and ideas to improve the organic production and marketing of tree fruits in the Midwest. Please use this newsletter to do that. One way is via NetEx. NetEx allows you to share your needs. We have a few postings inside.

While MOSES is still our partner providing wonderful support from the Risk Management Agency and from every single staff person, the Network has been incorporated in the state of Wisconsin so that, should the occasion or need arise, we can directly receive funds. An Advisory Council, which I wrote about in our Spring issue, would provide important financial oversight as well as help direct the future of the Network. So please let me hear what you think of this idea and/or your interest to serve on it.

Inside this issue read about: Kathleen Delate of Iowa State University shares part one of two about her sabbatic in New Zealand on organic apple production; John McPherson gives us part two of three on the history of apples in the USA; new organic projects at Penn State and at the University of Vermont; increasing opportunities to use EQIP funds to help in pest management; new items on our website; a new tool to ID natural enemies of insect pests; list-serv topics and how to join the list-serv.

Next issue those with research projects underway at Iowa State University, U of Wisconsin, and Michigan State U. will update us on their research. I also learned at the Prairie Fruits Farm field day on September 13 that the University of Illinois has an organic apple research project at Dixon Springs in southern IL, which we hope to hear more about.

Let me hear from you! I like to know what you think and want.

--Deirdre Birmingham, 608-967-2362; deidreb@mindspring.com



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The World of New Zealand Organic Apples Chapter One: An Introduction to the Land Down-Under

Kathleen Delate, Associate Professor, Iowa State University

Kathleen Delate spent January to June 2006 at Havelock North in Hawke's Bay, New Zealand, working on organic apple research. Here, in the first of two articles, she describes what it was like to be in New Zealand and in the second, she will cover how organic apples are grown in New Zealand and focus on similar challenges for organic orchardists in the Midwest. Her color photos can best be seen in the web edition of this newsletter at <http://www.mosesorganic.org/treefruit/newsletters.htm>

Bite into a crisp, juicy organic 'Royal Gala' or 'Braeburn' apple from New Zealand and experience the pleasure that drove me to travel nearly 8,000 miles to the Land of the Long White Cloud to understand how it's done. Don't get me wrong—I love the organic apples from the Midwest and the West coast, but there's something about a New Zealand organic apple that sets it apart from the rest.

When you first approach New Zealand from the air, you are struck by the resemblance of the country to its Maori name—Aotearoa (the land of the long white cloud). Clouds drift across the turquoise blue Tasman Sea—part of the same magnificent South Pacific Ocean that greets you upon sailing out from Hawke's Bay off the southeastern coast of the North Island.

New Zealand's Fruitbowl

Hawke's Bay is the fruitbowl of the North Island, with acre upon acre of tidy orchards of pome fruit (apples and pears), apricots, quinces, peaches, nectarines, and kiwifruit tucked behind 18-foot high hedges—rows of alder, Causarina, and other windbreaks. Remember: the fruit is called "kiwifruit" (one word), while the national, nocturnal, flightless bird, and the nickname they give each other is "Kiwi." In addition to protecting the fruit from the howling winds that blow offshore and down from the mountains in the winter when night temperatures dip into the high 30s (June to August), the windbreaks are required to keep any pesticide residue from drifting onto residents and tourists alike who often ply the roads in snazzy racing bicycles or classic Triumph motor "bikes" as they're

called there. (See the NZ movie "World's Fastest Indian" with Anthony Hopkins to get the full flavor of the Kiwis' inventiveness and love of "bikes").

North vs South

Most people think of New Zealand as "Lord of the Rings" and Fiordland—the magical glacier-laden portion of the South Island where penguins play and ice caps leave you breathless—but I prefer the North Island, which has mighty fine landscapes and much more Maoritanga—the native culture you may have seen in the world-famous "Whale Rider" movie, set on the East Cape of the North Island.

Captain Cook first anchored in New Zealand waters in 1769 and opened the door to the whalers, the loggers and the gum diggers (mining underground sap of huge kauri trees, processed into wood preservatives used round the globe). The advent of colonization led by the missionaries was followed by farmers, merchants and government entities (since someone had to control alcohol and prostitution). The Maori, who had arrived in New Zealand some 800 to 1200 years ago, watched the invasion of the foreign culture, and soon split into various camps—some befriending the white man (pakeha), adorning their adopted bowler top hats with native bird feathers—while others maintained isolation from the invaders. They quickly determined what relationship was in the best interest of the iwi (the tribe).

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Milford Sound, South Island, NZ. Photo: K. Delate

The Land Issue

Above all, the central issue was land. The willingness to sell the precious commodity/lifeblood led to several conflicts, culminating in the New Zealand Wars of the 1860s, where hundreds of Maori and British soldiers perished. Everyone thought the Maori would eventually become extinct, like the moa birds they had hunted, due to introduced diseases and the Victorian notion of white hegemony, but thanks to Maori survival skills and the Treaty of Waitangi that enabled the Maori to seek re-

dress for illegal dispossession of lands, today, 20-30% of the NZ population is of Maori descent (depending on whose statistics you believe). Imagine North Dakota and the reparations made to native Sioux and you have some idea of what is on-going in NZ today. Unlike the U.S., however, the NZ government is insistent that Maori concerns are considered in all government-funded projects and, oftentimes, projects are put on the back burner until local iwi are included. This pact is connected to the perpetual champion the Maori have in Queen Elizabeth because the Treaty, after all, is with Mother England.

Organic Orchards

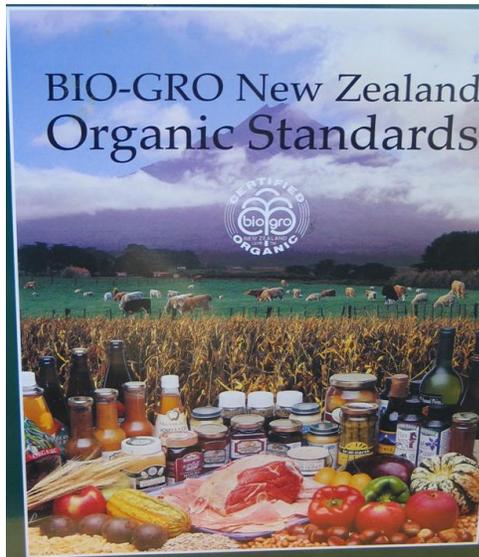
Twenty-five percent of the apple growers in the Hawke's Bay area are organic, which may be the highest concentration of organic growers in the world. In a country of four million people, there are 1,000 organic growers and 66,000 acres of organic production. Of those acres, 2,964 are in organic apples—which equals 10% of all the apples in the country. Ask any grower 'why organic' and you are likely to hear two reasons: the environment and the price. This year, when conventional apples were selling for a lower price than the cost of production, organic apples were at an all-time premium. As a matter of fact, you may not have been able to buy an organic NZ apple this year because demand out-stripped supply.

The life of a NZ organic apple grower is not easy—similar to our situation here in the Midwest. In addition to the challenges of organic production (the focus of Chapter Two), there is the constant pressure for development in an increasingly touristic area. Despite the hardships, the natural world cannot be beat. The Kiwis love of the outdoors is infectious: from the perilous bungy-jumping into thundering river chasms (which we only watched), to the glorious hikes to crystalline bridal-veil waterfalls, to boogie-boarding the shore break sweep at Waimarama (Maori for "clear water"). We joined right in the practice of "Work Hard; Play Hard" every day.

A Hawke's Bay Weekend

Here's a typical weekend: wake to the sounds of tui (a black bird with a tuft of white feathers whose call resembles a calliope) and chubby bellbirds in the beautiful garden outside the cottage door in the tiny farming hamlet of Clive in Hawke's Bay. Purple Agapanthes flowers and towering totems of thyme-like

shrubs glow in the perfect 70-degree January morn that races to 78 degrees within 3 hours. The squawking magpies, Aussie immigrants, dressed like butlers in their deep black feathers encasing a crisp white breast, roost on the telephone line, anticipating the arrival of the tui birds.



NZ National Organic Standards.
Photo: K. Delate

All around it's another glorious morning that literally pulls you out of bed to embrace it at 6 AM to head for the Black Barn Farmers Market-in-the-Round. A well-crafted market, like ancient faires of yore, the Black Barn vineyard and winery encircles twenty local vendors under the shade of ash trees draped with yellow-ochre canvas tarps to protect them from the sun and wind. Fresh, right off the farm, drippingly sweet, white-fleshed peaches, nectarines and strawberries, along with cheddar cheese from Hohepa,

a near-by organic farm/home for disabled folks, are offered for tastings next to the giant organic 'Desiree' potatoes dug on Andrew Seager's biodynamic farm yesterday. Andrew emigrated from England to the more civilized clime of NZ and was recently called to testify at an organic industry strategy focus group, sponsored by the national department of economic development. Organic is viewed as just another revenue stream in this export-focused economy—not a 'fringe' group or an outlier in the sea of industrial ag—and the government is keenly aware of organic's potential. Andrew laughs about the conflict between British Isle love of dairy that fuels the NZ economy and the obsession "to be fit" shunning all cholesterol-laden fare.

Hawke's Bay, with an average rainfall of 28 inches, and temperatures averaging 75 degrees F. in the long, pleasant days of the spring/summer/fall from September to May, may be as close to paradise as one can find. There are generally two designations for the weather there: 'fine' and 'unsettled.' It is, after all, a 'maritime' climate, completely surrounded by the sea, which often throws up blustery, rainy days and cool nights that bring the wool out of the closet. The same sea and mountains that produce the rain that keeps the Hamilton and South Canterbury pad-

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History of the Apple in America, Part II

By John McPherson, Horticulturalist, Carpenter St. Croix Valley Nature Center, Hastings, MN

In part I of this story I explained how the original wild apple has been traced to the mountain forest of present day Kazakhstan. In time it spread thru Asia and Europe. The earliest immigrants to America brought grafted Old World apple trees, as well as seeds saved from apples they ate on their passage over to the New World. These seedling trees eventually hybridized or "crossed" with wild American crabapples, passing on the genetic traits to adapt to the soil, climate, and day length of North America.

These early American apples were far from what we think of apples today. The vast majority of them were known as "spitters"- so tart and unpalatable that Henry David Thoreau once wrote "sour enough to set squirrels teeth on edge and make a jay scream." At that time apples were something you drank. Hard cider was the fate of most apples grown in America up until Prohibition. The notion of the apple as a healthy and wholesome fruit for fresh eating is a modern invention, part of a public relations campaign by the apple industry in the early 1900's to reposition a fruit that the Women's Christian Temperance Union had declared war on.

Virtually every homestead in America had an orchard from which thousands of gallons of cider were made every year. In many rural areas cider was the primary beverage, consumed more freely than water, even by the children. Americans inclination toward cider is the only way to explain John Chapman's (Johnny Appleseed) success. How else could the man make a living selling spitters to Ohio settlers when there were already grafted trees bearing edible fruit available. Chapman didn't believe in grafting trees. He saw no sense in making an incision in a perfectly good tree. So who was Johnny Appleseed? How do you separate the myth and legend from truth? That story is as long as the tales are tall, so I will give you a taste of it as it pertains to apples in America.

If you happened to find yourself on the banks of the Ohio River in the spring of the early 1800's you might have caught site of a peculiar craft consisting of a pair of hollowed-out logs that had been lashed together to form a rough catamaran, a sort of canoe plus sidecar. In one of the dugouts lounged a skinny man of about thirty who may or may not have been wearing a coffee sack for a shirt and a tin pot for a hat. The other hull, his sidecar, was riding low in the water under the weight of a small mountain of seeds that had

been carefully blanketed with moss and mud to keep them from drying out in the sun.

This would be an annual spring ritual for Chapman, planting his nurseries in the next tract of wilderness he judged ripe for settlement. By the time the settlers arrived he would have trees ready to sell for six cents apiece. In time he would find a local boy to look after his trees, move on and start the process all over again. By the 1830's John Chapman was operating a string of nurseries from western Pennsylvania through central Ohio and into Indiana. This barefooted wanderer had amassed 1200 acres of prime real estate.

John Chapman was born in Leominster, Massachusetts on September 26, 1774. Two of his siblings died shortly after birth. His mother died of tuberculosis when he was only two. He started out his life's work when he was 23. It is said that after a horse kicked him in the head Chapman envisioned heaven as filled with apple trees in bloom. From that time on, he took as his mission the planting of nurseries and distributing apple seeds and saplings to all that would grow them.

It didn't hurt his cause that by law a land grant in the Northwest Territory specifically required a settler to "set out at least fifty apple or pear trees" as a condition of his deed. The purpose of this was to encourage homesteaders to put down roots. Since a standard apple tree normally took ten years to fruit, an orchard was a mark of a lasting settlement. His strategy was to continually move his nurseries to keep pace with the ever-shifting frontier. Chapman could be sure of a strong demand for his seedlings, even if most of them would yield nothing but spitters.

Robert Price, his biographer, wrote that he "had a thick bark of queerness about him." Indeed, a man with no fixed address his entire adult life. Chapman preferred to spend his nights outdoors; one winter he set up house in a hollowed-out sycamore stump outside Defiance, Ohio where he operated a pair of nurseries. A vegetarian living on the frontier, he deemed it cruelty to ride a horse or chop down a tree. Not exactly the mindset of the day. He once punished his own foot for squashing a worm by throwing away his shoe. He liked best the company of Indians and children.

Chapman lived everywhere and nowhere. In the fall

he returned to the cider mills of western Pennsylvania to sift through the pumice to collect, wash and sort his seeds for next springs' plantings. He traveled by foot, raft or dugout carrying his seeds and the simplest of camping gear. His tin pot used for gathering nuts and berries in season, hauling water or milk from a settler's cow, boiling potatoes or a handful of course ground meal and yes, at times, probably a hat on his head. Always barefoot, even in the winter, his feet were described as gnarled, horny and tough as an elephants. Throw on the burlap coffee sack and ragged pants and this is the character that roamed the frontier waterways selecting the prime sites, clearing the brush by hand and using it to fence his nurseries from straying animals. He would plant his seeds in neat rows. Summers were spent repairing fences, tending nurseries and recruiting locals to keep an eye on and sell his trees since he was seldom in one place long enough to do that work himself.

Most of what is known about Chapman comes from accounts left by many settlers who welcomed this famous appleman/evangelist into their cabins for a meal or a place to sleep. The tales are a rich soup of legend sprinkled with chunks of historical and biographical fact. Stories like how he ran barefoot thirty miles to Mount Vernon to warn of the English and Indians coming in the war of 1812, or that he spent a night sleeping in a bear's den with the mother and her cubs and how he was spotted sleeping on an iceberg for hours as it drifted down the Allegheny River. Chapman saw himself as a bumblebee on the frontier, bringer of both seeds and the word of God: sweetness and light. A man anointed "to blow the trumpet in the wilderness." After supper in a settler's cabin he would ask his host if they would hear "some news right fresh from heaven." He'd then launch into a sermon fired with a mystic's zeal. He was also welcomed by many of the Indian tribes of the Northwest Territory where he was respected for his knowledge of herbs and their curative powers, his compassion for all living things and his word as a peacemaker.

At age 71, while living near Fort Wayne, Indiana word came one March day that cattle had broken through the brush fence around one of his nurseries some twenty miles away. He set forth immediately to repair the damage. On his return trip he was stricken with a disease known as winter plague (pneumonia). He found shelter with a friendly settler but failed to survive and died on or about March 18, 1845.

There is no way to know how many million seeds he planted in the hundreds of nurseries between the Ohio and Mississippi Rivers. Many of his seedlings may have crossed the plains in covered wagons to produce and flourish in some western states. It takes a leap of historical imagination to appreciate just how much the apple meant to people living two hundred years ago. To the homesteaders it was something they could not imagine living without. Knowingly or not, Chapman's objection to grafting trees gave the apples in America almost infinite genetic diversity. Not all of them were spitters. The sweeter ones were the only source of sugar or sweetness for many on the frontier. The descendents of these apples are still found in grocery stores and fruit stands around the world.

Today we have narrowed this genetic ocean into a small pool that spits out what has been described as plastic looking, blemish free, saccharine filled orbs. This is where I will pick up from in part III- the modern apple, in the next issue of the Just Picked. ó

After Apple Picking

By Robert Frost

My long two-pointed ladder's sticking through a
tree
Toward heaven still,
And there's a barrel that I didn't fill
Beside it, and there may be two or three
Apples I didn't pick upon some bough.
But I am done with apple picking now.
Essence of winter sleep is on the night,
The scent of apples: I am drowsing off.
I cannot rub the strangeness from my sight
I got from looking through a pane of glass.
I skimmed this morning from the drinking trough
And held against the world of hoary grass.
It melted, and I let it fall and break.
But I was well
Upon my way to sleep before it fell,
And I could tell
What form my dreaming was about to take.
Magnified apples appear and disappear,
Stem end and blossom end,
And every fleck of russet showing clear.
My instep arch not only keeps the ache,
It keeps the pressure of a ladder-round.
I feel the ladder sway as the boughs bend.
And I keep hearing from the cellar bin
The rumbling sound
Of load on load of apples coming in.
For I have had too much
Of apple-picking: I am overtired
Of the great harvest I myself desired.
There were ten thousand fruit to touch,
Cherish in hand, lift down, and not let fall.
For all
That struck the earth,
No matter if not bruised or spiked with stubble,
Went surely to the cider-apple heap
As of no worth.
One can see what will trouble
This sleep of mine, whatever sleep it is.
Were he not gone,
The woodchuck could say whether it's like his
Long sleep, as I describe its coming on,
Or just some human sleep.

New Additions to our Website

We aim to make <http://www.moses.organic.org/treefruit/references.htm> your place for one-stop shopping on information relevant to growing and marketing tree fruits in the Upper Midwest. Also check out the RESEARCH page for past and present projects. If you find useful information not already on our website, please let the Network Coordinator know so that it can be added.

The following items were added since our Summer (July) issue of "Just Picked."

Under REFERENCES:

OVERVIEW

"Uncommon fruit: Delectable, pest-resistant, exotic and attractive." by Lee Reich, who writes: "Most growers gravitate toward the familiar when considering what fruits to plant. But grow these fruits and you're competing on the world market; apples marketed as a round, red commodity." "Consider then a handful of uncommon fruits that, in addition to having unique and delectable flavors, are relatively free of pest problems. Such fruits could tap into specialty markets, including.... organically grown foods..." <http://www.newfarm.org/features/2006/0906/uncommonfruit/reich.shtml>

APPLES, GENERAL:

"Organic Apples." The web-based Agricultural Marketing Resource Center has two pages of links on trends, markets, marketing, processing and manufacturing of hard cider, production, businesses and case studies on organic apples. <http://www.agmrc.org/agmrc/commodity/fruits/apples/organicapples.htm>

"A future for organic apple growing in the Northeast." by Laura Sayre of New Farm. The Midwest shares many of the same apple insect and disease issues with the Northeast. Includes "Sample spray schedules for organic apple production in the Northeast" and information on new (2004) disease and insect pest management tools. <http://www.newfarm.org/features/0504/apples/orchard.shtml>

"Hard times for a big organic orchard. One New England farmer shares some of the struggles and triumphs of going organic." by Eesha William. December 23, 2004. <http://www.newfarm.org/features/1204/apples/index.shtml>

APPLES, DISEASES

"Evaluation of antagonistic bacteria, alternative antibiotics, and non-traditional products in the management of fire blight on apples" – Identifying useful alternatives to streptomycin. Herbert S. Aldwinckle, Nicole A. Werner, NYSAES. Cornell University, Geneva, NY, naw26@cornell.edu, 315-787-2367.

Disease-resistant apple varieties from the Purdue–Rutgers–Illinois (PRI) research project. <http://www.hort.purdue.edu/newcrop/pri/coop32.html>

On the RESEARCH page:

The University of Vermont is starting a project titled *"Using Alternatives to Enhance the Adoption of Organic Apple Production through Integrated Research, Education, and Extension."* <http://orchard.uvm.edu/uvmapple/pest/#organic%/20Pest%20Management>

"Organic/Sustainable Apple and Grape Production" – Ian A. Merwin, Department of Horticulture, has received three grants for research relating to organic and sustainable apple and grape production, including \$497,000 from the USDA-IREE program for research on bio-based management and microbial mechanisms of apple replant disease. Merwin is also comparing organically grown vs. integrated fruit production Liberty apples, and evaluating geotextile and composted hardwood bark mulch. Ian Merwin, im13@cornell.edu, 607-255-1777.

"Evaluation and Incorporation of the Fungus Beauveria bassiana, for Control of Plum Curculio in Commercial Tart Cherry and Apple Production" – Mark Whalon, Michigan State University. <http://ir4.rutgers.edu/Binars/biopesticide%20list.pdf>

Research on habitat for beneficial insects. Michigan State University. Includes information on the project, why native plants and biological control, project results, plant fact sheets, and field days: <http://imp.msu.edu/plants/home.htm>. ó



EQIP Opportunities for Orchards

In our last issue of "Just Picked", brief information was given on EQIP (Environmental Quality Incentives Program) funds available in some states to help growers transition acreage to organic management. EQIP, a program of the Natural Resources Conservation Service (NRCS) of the USDA, is being used in Wisconsin and Michigan to also help growers fund reduced pesticide use in orchards primarily through scouting and other pest management tools. Organic growers can avail themselves of these cost-share opportunities.

"Currently the NRCS in Wisconsin is rewriting its Pest Management Standard (595) to include more IPM components for orchards", according to Regina Hirsch, outreach specialist with the UW-Madison Center for Integrated Agricultural Systems (CIAS). Dr. Hirsch started working in 2003 with the Wisconsin Apple Growers Association and CIAS to educate NRCS staff about orchard management and IPM, and to introduce growers to the EQIP program. Currently, there are 23 orchards in Wisconsin using EQIP to aid in scouting costs of insects and diseases. As part of the EQIP contract, each of these growers works with an orchard IPM specialist to develop an IPM plan for them. The plan is updated annually through a four-year EQIP contract, based on the grower's ability to adopt IPM. At this time, Wisconsin EQIP provides approximately 50% of the total cost (\$39/acre) for a qualified orchard specialist scout their orchards during the growing season.

Michigan growers started using the EQIP program in 2004 for apples and cherries, as well as asparagus and nursery crops. Grape growers are now submitting applications. Cost-shares are being applied to pest management, nutrient management, cover crops, filter strips, windbreaks, and agricultural containment facilities (e.g., containing fertilizers and pesticides so they don't contaminate surface and ground waters.) If you are in Michigan and want more information, contact your local NRCS office. (See below.)

"The important part of EQIP that must be remembered," said Hirsch, "is that EQIP was set-up to protect natural resources. Therefore, for orchard growers to be eligible for EQIP funds there needs to be a resource concern on their land." Examples would be potential of groundwater or surface water contamination from pesticides; pesticide drift to adjacent crops, residential or natural areas; erosion; or degradation of critical wildlife habitat.

The programs are not generic among the states. For example, according to Hirsch, the difference between Michigan and Wisconsin is that Michigan offers a list of IPM practices from which a grower and a NRCS staff member selects what they feel best addresses the identified resource concern. Wisconsin is expected to offer in its revised Pest Management Standard (595) a bundle of IPM practices (e.g., scouting; weather monitoring equipment; cultural practices to control disease inoculum; and reduced-risk pesticides) that a grower learns to use over their four-year contract. Once the revised Standard for Wisconsin is available, it will be announced in the January 2007 issue of "Just Picked" and on the thinkipm.org website.

To locate your local NRCS office, go to <http://www.wi.nrcs.usda.gov/about/stc.html> on the web, click on your state, then "programs", and then "EQIP." If your state does not yet offer incentives to enhance environmental quality in orchards, and you want to learn more about how they did it, visit the website of the Center for Agricultural Partnerships (CAP) at www.agcenter.org and then contact Larry Elworth, Executive Director of CAP, at lrelworth@agcenter.org or 828-285-9340. ó



New Zealand....From page three

docks awash in greens—chartreuse, olive and spring green—even though it is coming on Fall, heading from summer to the delicious time of the year when it's still warm, the children are back in school, and the apples are ready for harvest. There's not much of a gap between summer fruits (peaches, nectarines, plums and berries) and the pipfruits and kiwifruits—which makes for non-stop, fresh fruit heaven.

With 40 million sheep in the country, wool vests, hats, gloves and sweaters are de rigeur to survive the frequent squalls. Living with a raucous geology, part Gondwanaland (the original motherland of Earth) and continually changing (earthquakes, mud slides, volcanic eruptions and the occasional tidal wave), Kiwis embrace risk and change unlike any other population I have observed in the developed world. Faced with dwindling revenue, some conventional apple orchardists are converting apple lands to vineyards in Hawke's Bay. The Crab House Winery—so named because the land under the vineyard was previously under seawater until 1931—when the earthquake that flattened the town of Napier brought into production acres of new lands.

HortResearch

I conducted my sabbatical research at HortResearch, an institution much like the USDA-ARS (Ag Research Service) with one major exception—scientists working there could not begin any projects unless they had grower buy-in and financial support from industry. Once subsidies were deleted from the ag sector in the 1980s, former government research outfits were also retooled to compete for outside funding to survive. A leaner, more focused organization was formed. My mentor, the HortResearch entomologist, James Thomas Sinclair (aka Jim) Walker, had received numerous awards from the pipfruit industry for his work in reducing pesticides in orchards. Oh the joy—to know you are part of an organization that growers love. Phillip Mardon, a local grower, boasted: "This variety was developed at HortResearch" as he sliced us a sweet, white-fleshed nectarine that melted in your mouth.



Hawke's Bay Produce. Photo: K. Delate

The organic growers are a friendly, industrious lot, banding together to solve the issues facing them. All the growers look alike to us—ruddy-faced or deep tanned, wrap-around sunglasses, floppy Aussie out-back hats, short leather slip-on boots, and khaki shorts even in 50-degree weather. All have similar names: Peter Fitzpatrick, Peter Weskett, Kevin Corbett, and Craig Dowling: English, Scottish, Irish—long gone from the homeland, driven away as “criminals” for being poor, or anxious to capitalize on the opportunities—all blended together in the brave new world of Aotearoa. Most growers are certified through the private Bio-Gro IFOAM-certified organization but, lately, the new Ministry of Ag-supported Agri-Quality certifiers were making in-roads.

NZ Pests

At the time of my sabbatical, organic apple growers were successfully producing organic apples, spraying sulfur for scab (called ‘blackspot’ here) and Madex™ codling moth granulosis virus, in addition to Entrust™ and Bacillus thuringiensis for leafrollers—the dreaded export-stopping pest. Because we do not have this leafroller in the U.S., Rose Brown, the USDA inspector from D.C. via Appalachia is posted in New Zealand to ‘pre-clear’ shipments to the U.S. We became fast friends as we pursued the same goal: keep the organic apples flowing to the U.S.

The other project I was fortunate to be able to undertake on my sabbatical was assisting in the development of scab-resistant varieties with the apple breeders at HB HortResearch, Allan White, Richard Volz, Vincent Bus, and Paul Brookfield. In addition, with physiologist, Jason Johnston, we looked at extending the storage life of scab-resistant cultivars under C.A. (controlled atmospheres of 2% oxygen and 2% carbon dioxide, compared to a normal atmosphere of 20% oxygen and <1% carbon dioxide). These C.A. conditions are known to slow the apple's respiration and help their reported poor shipping potential.

Also, C.A. can be used as a substitute for insecticides to kill the quarantined leafroller and wooly apple aphid in shipments of organic apples. The low oxygen within the sealed C.A. container makes it difficult

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Pennsylvania Seeks PROFIT for Farmers with its Organic Orchard Initiative

Pennsylvania State University Fruit Research and Extension Center is currently testing alternative pest management strategies such as cultural management, biological controls, and alternative materials that are proving highly effective in reducing pest levels on fruit crops. Toward that end, they established an organic apple demonstration orchard in May of 2004. This site will be utilized over the next ten years to develop recommendations to assist growers in transitioning their apple orchards to organic management. They believe that “the combination of consumer demand for organic and the development of new alternative pest management strategies has the potential of providing a means for PA fruit producers to continue profitable fruit production and marketing in the state,” according to their website <http://fpath.cas.psu.edu/RESEARCH/PROFITdemoorchard.htm>.

Several key groups have joined efforts to redirect and transition the PA fruit industry to organic. The State Horticultural Association of PA's Executive Board supports the move and initiated a task force to begin the process, which they call PROFIT, an acronym for Pennsylvania Regional Organic Fruit Transition. Task force members consist of growers, fresh fruit packers, processors, and Penn State research and extension personnel. Twenty-five faculty and extension educators from PSU are contributing time and effort toward the transition project. The PA Department of Agriculture, The Rodale Institute, and PA Certified Organic are also in support, committing personnel and aid to the transition project. Local and state legislators indicate support and a willingness to contribute.

In the demonstration orchard, two one-acre blocks were planted with one acre consisting of predominantly Enterprise and another predominantly Goldrush. These varieties were chosen because of their resistances to diseases and their potential as both processing and fresh market apples. Processors are currently testing their potential for the processing market. The economics to establish and manage the orchards organically will be determined.

Penn State was successful in procuring a SARE grant for \$99,208 toward this project. Congratulations! ó

New Zealand....From page eight

for the insect to breathe while the elevated carbon dioxide triggers a lethal response of extended spiracle opening. Once C.A. containers are opened, there is no damaging residue, as atmospheres quickly return to normal.

'Pinkie' is one such scab-resistant cultivar that I am working on introducing to the Midwest. With its wonderful rosy luster on a pale yellow background, 'Pinkie' is a deliciously sweet apple—especially when cooked with the tasty, three-grain porridge for breakfast.

In the next article, I will describe the regime used by NZ organic apple growers for insect and disease management and the on-going research there. The thing I will remember the most about Kiwi farmers is their love of the land: Jim Lambe, an organic dairyman on the South Island, asked me one day with his thick brogue and a twinkle in his eye: “Are you going to farm one day?” grasping full well the shared dream within just three hours of meeting me. In the next article, I will cover details on organic apple growing down-under and lessons Midwesterners can use from our fellow organic farmers. ó

Research Grants Available from the Organic Farming Research Foundation

December 15, 2006 is the deadline for research proposals to OFRF. All are welcome to apply including growers. Growers must be involved in all projects submitted by non-growers. While proposals are reviewed in all subject areas, OFRF encourages proposals in three topic areas, of which the following two are relevant to midwestern tree fruit growers:

- Economic constraints and opportunities relevant to the viability of small- and medium-scale organic farms and ranches;
- Projects that investigate the interactions between components of organic systems and that take a systems-management (rather than an input-substitution) approach to solving production problems.

For more information visit www.ofrf.org or call 831-426-6606. ó

The NetEx

The Network Exchange, or NetEx, is for you to use. Please use it similar to a Classifieds section, although currently at no charge. NetEx allows Network participants to exchange information on services or things to share, buy, or sell. It is not for product or input advertising. However, for now, knowledge-based services provided by Network participants are fine. Other examples: exchange or share scion wood, find others to make bulk purchases, orchard consulting or pest scouting services, find orchard or processing equipment, host a work day, offer a seminar (such as grafting or pruning), and any other way to help us improve our organic production and marketing of tree fruits, except for product advertising.

Looking for Natural Fruit

Natural Direct, LLC distributes produce directly from farmers in northern Illinois to homes in the Chicagoland area. Organic certification preferred, but not required. Farm pickup is available. Contact Scott at 630-551-7878 or scott@naturaldirect.com.

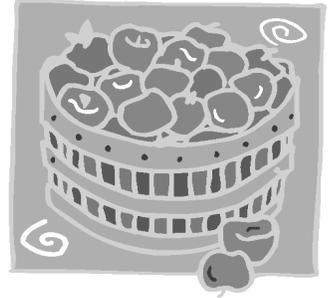
B & J Consulting

Eco-system organics of fruit trees.
Setup * Maintenance* Conversions
Bob Johnson 608-624-3777
Jamie Bjornsen 563-538-4546

Network Lending Library?

Interested in seeing this happen? We are happy to host one if interest is sufficient. Contact Jim and Barbara Lindemann. 608-838-8206, jfl0102@yahoo.com

Thank you to our 2006 field day hosts!



Thank you to John McPherson and the Carpenter St. Croix Valley Nature Center near Hastings, Minnesota; David and Perry-O Sliwa of Sliwa Meadow Farm in Decorah, Iowa; and Leslie Cooperband and Wes Jarrell of Prairie Fruits Farm in Champaign, Illinois, for hosting field days for us this summer. Leslie and Wes had 80 people show up at their farm! Fresh fruits and chevre made a wonderful combination!

Also thank you to Bob Johnson and Jamie Bjornsen who not only taught my husband and I, but about 10 others, on pear and apple tree planting on Earth Day at our farm.

In addition to the RMA, event sponsors included the Minnesota Department of Agriculture to bring in Mark Whalon of Michigan State University to John's field day and the University of Illinois at Urbana-Champaign's Agroecology Program for funding the field day and handling all logistics at Prairie Fruits Farm.

If you are interested in hosting a field day, an orchard walk, a demonstration or work day, please feel free to contact me. Gathering at someone's orchard allows many heads to get together and share experiences, lessons learned, and ideas. We not only discuss, but often see what is being discussed in the orchard context. So don't feel like you have to have all the answers, because no one does! Hosts are simply providing a venue for us to learn together.

Also feel free to just invite growers yourself via our list-serv or newsletter for an informal gathering at your orchard, be it during the season or maybe in the winter months to prune trees or graft together. Potlucks and BYOs are welcome.

Network List-serv

List-serv topics since the summer newsletter included grazing in orchards, Surround and codling moth control, irrigation set-ups and resources, EQIP (Environmental Quality Incentives Program) meetings in WI, and beneficial insect info on MSU's website. Otherwise the list-serv grew (understandably) quieter as harvest picked up.

If you missed these discussions, they are still available as past messages at <http://groups.yahoo.com/group/organictreefruits>. You will need to sign-in first to view them because access is restricted to list-serv members. If you wish to join the list-serv, just send a request to do so to the Network Coordinator at deirdreb@mindspring.com and include your email address in the body of your message. 170 are now on the list-serv. Unsubscribing, for whatever reason, is even easier. You can do it yourself or just ask me to do it. ó

New Organic Apple Research Starts in Vermont!

The University of Vermont (UVM) and its partners were successful in a highly competitive process to receive a USDA Integrated Organic Program (IOP) research and education grant for a project titled, "Using Alternatives to Enhance the Adoption of Organic Apple Production through Integrated Research, Education, and Extension." The USDA is funding the first three years of what UVM envisions to be a longer term project of six to nine years to enhance the adoption of organic apple production through the following objectives.

1. Establish an integrated and collaborative organic endeavor at UVM, a land-grant institution, to develop and implement research on limitations and constraints to organic production.
2. Implement organic extension education for current and prospective growers within the region and beyond.
3. Develop an educational program for both graduate and undergraduate students in organic agricultural systems.

The objectives of the project's first three-year phase funded by UVM's IOP grant are:

Apples - Research and Extension

1. Incorporate and evaluate new apple cultivars and research-generated knowledge of apple ecosystem dynamics into organic production systems to determine sustainability and profitability.
2. Collaboratively develop and implement with stakeholders a multi-dimensional extension program that addresses their priorities and needs and improves the competitiveness of organic apple producers.

Academic Education - Classroom and hands-on, experiential learning

3. Collaboratively develop a course on organic fruit production that effectively integrates classroom and experiential learning and that includes principles, practical aspects, and complexities of organic production.

The project involves at the University of Vermont the departments of Plant & Soil Science; Extension; and Community Development and Applied Economics; as well as partners in Horticulture at the University of Arkansas; and at the University of Maine the Plant, Soil and Environmental Sciences Department; and Cooperative Extension. Research will take place at the UVM Horticultural Research Farm where they started transitioning an older orchard last year to organic management and a new orchard was planted on land that they started transitioning this year to organic. Growers involved in the project are two certified organic farms in VT, Shelburne Orchard and Ricker Hill Orchards, as well as the Northeast Organic Farmers Association - VT.

An organic apple website is being developed and will be a prominent component of the existing UVM Apple Orchard Website. For more information, contact Heather Darby at heather.darby@uvm.edu or (802) 524-6501 ext 206.

Identifying Natural Enemies of Insect Pests

Michigan State University has produced a new pocket-sized bulletin: *Identifying Natural Enemies in Field Crops* by Mary Gardiner, Christina DiFonzo, Michael Brewer and Takuji Noma.



This guide is divided into sections by major groups of natural enemies and spiders: beetles, true bugs, lacewings, predatory flies, parasitoids, spiders and ants. The publication can easily be used in the field with its plastic-coated 3.5" X 5.0" pages. (View sample pages at <http://ipm.msu.edu/pubs-natural.htm>) The guide was originally conceived in response to the critical role beneficial insects play in managing soybean aphid populations. Although it is geared for field crops, it is appropriate for use in other crops and by homeowners.

The cost of the 46-page guide is \$10. Bulk orders of 10 copies or more can be purchased at the reduced price of \$7. Orders can be placed on-line at: <http://www.emdc.msue.msu.edu/> Search for this publication by using inventory number E2949.

If I get enough requests, I can make a bulk purchase to distribute this winter at any of the events listed on our Events Calendar. Let me know if you want one or more – Deirdre (See contact info on page 1.)

Events Calendar

December 5-7 – **Great Lakes Fruit, Vegetable and Farm Market Expo**, Grand Rapids, MI. Includes a day-long session on organic production and marketing.

February 23-24, 2007 - **Upper Midwest Organic Farming Conference**, La Crosse, WI. www.mosesorganic.org

March 4-6, 2007 – **National Organic Tree Fruit Symposium**, Kellogg Center, East Lansing, MI. Watch “Just Picked”, our website and list-serv for information as it is available. Michael Phillips has been invited to present.

If you know of other events to announce, please contact the Network Coordinator.

The Upper Midwest Organic Tree Fruit Growers Network was started in 2004 for the purpose of sharing information and encouraging research to improve organic tree fruit production and marketing in the Upper Midwest. The Network is supported by the Midwest Organic and Sustainable Education Services (MOSES) and the Risk Management Agency of the USDA in addition to other event sponsors. This newsletter is produced by MOSES, layout by Jody Padgham.

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