

Green Space of the Month – March 2003

Three Sisters - Good Road Community Garden, Newcastle upon Tyne

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The Haudenosaunee (Iroquois) Native American tribe were the first to tell the story of Three Sisters, who grew up together in harmony – corn, beans and squash. It is a story that is shared by people in the Caribbean, and one we can learn from here in Britain. In Newcastle upon Tyne in the cold North East of England, an innovative project aims to investigate how different Native American cultures have developed sustainable horticultural methods and demonstrate how these principals can be applied over here.

Good Road community garden is an experiment in ecologically sound approaches to vegetable gardening, such as organic composting, companion planting and biological control of pests. This is a wonderful urban green space, which can be used as an inspiration and a resource by community groups interested in food growing or in cultural diversity.

Meanwhile, visits from Native American teachers introduce school children to accurate information about the lifestyles of First Nation peoples, who often lived in harmony with nature, and whom the children may otherwise never have the chance to meet. This project highlights the fact that interest in different cultures is not about focussing on the countries of origin of local ethnic minority groups. For there is no significant community of Native Americans living in Britain; yet through projects like Three Sisters, white children are able to learn about the richness of other cultures, and how this can be drawn upon to enrich their own culture.

‘The corn, the bean and the squash are three loving sisters who must always live together to be happy. The older sister is tall and graceful, the next younger loved to twine about her and lean for strength upon her. The youngest rambled at the feet of their sisters and protected them from prowling enemies. When the moon drops low and the summer night is lit only by the mysterious light of the stars, these three sister come forth in human form wearing their green garments and decked in blossoms. They have been seen dancing in the shadows, singing to their mother earth, praising their father sun and whispering words of comfort to mankind. And women and men, to show gratitude, call the three sisters Dyonheyko, “they who sustain our lives”’.

Haudenosaunee (Iroquois ‘Longhouse’ people) legend

I first heard this story when I lived in South London, it was told to me by my elderly neighbour, Uri Peart, who in his youth had been a farmer in Jamaica. He did not mention mother earth and father sun. He was a devout Seventh Day Adventist. But he did explain to me that people in the Caribbean have long since practised companion planting – growing certain plants together, so that they support and

protect one another. He recalled being taught as a boy to put the three seeds – corn, bean and squash – side by side in one small hole in the soil, so that they would grow up together.

First the corn would sprout and grow up tall and strong; then the bean would twine around its stem, so there is no need to build a 'tipi' of bamboo canes as gardeners in Europe tend to do. In return for this support, the bean converts nitrogen from the air into food for the roots of the growing corn, so the gardener does not need to apply fertiliser. Then the squash will spread as ground cover, its broad leaves shading the soil to preserve moisture and protect the roots of the taller plants, while preventing weeds from taking hold, so again the gardener need not apply mulch.

Mind you, Mr Peart also told me about how he used to pick a banana from the wayside tree to eat on his way to school, or pick up a ripe avocado fallen from a tree as big as the Horse Chestnut which grew opposite our block of flats. It all sounded rather exotic and I was not confident that it would work over here where the climate is very different.

Inspiration for organic gardeners in England and Wales

We had a tiny pocket handkerchief of shared garden surrounding our building, in those days, and those who were fit enough and had some spare time would share responsibility for tending it. At the front our English neighbours kept a neat lawn and straight rows of flowerbeds in red, white and blue. But out the back my partner and I experimented with growing food. Our Ghanaian neighbours laughed heartily at our first small crop of potatoes, suggesting we should take them to the supermarket to sell. When we grew pumpkins, however, there were plenty to share with all our friends and we distributed seeds widely among our women's group and across the South London Permaculture network. Pumpkins are surely one of the most fertile kinds of squash we can grow.

Then when I heard about the Good Road project, I was very keen to visit and see for myself how companion planting was working successfully in the Jesmond Dene district of Newcastle upon Tyne, way up in the cold North East of England. Steve Tinling is the man behind the project. I met him on a cold winter's day, in his little port-a-cabin office alongside the council's plant nursery. Steve runs the Home Composting Project from here, distributing big plastic compost bins to encourage people to recycle kitchen waste in their own gardens. His office is beautifully decorated with garlands of colourful cobs of corn, such as you might see in the USA around Hallowe'en and Thanksgiving time. Steve told me how, very often people who have just come to pick up a compost bin will spot this display and comment, opening up conversations about the wider issues around sustainable horticulture.

In 1997, the Home Composting Project together with friends, colleagues and interested customers set up Good Road Community Garden to investigate traditional plant uses and historic growing methods of various Native American cultures. There is a demonstration garden, where you can see three sisters growing in the summertime, together with various wild or semi-domesticated plants. Sometimes visitors are surprised to see such an informal arrangement of plants in a garden. Well, that was the

reaction of the first Europeans arriving in the New World. Native American agriculture was rather different from European methods, so the settlers did not recognise what they saw as farming.

Sustainable agriculture of the Original People

The indigenous peoples often practised forage-harvesting for their food, medicine and amenity plants, alongside farming which worked with, not against, natural ecosystems. Only small areas of forest were felled for farming. The three sisters were planted on small mounds, not rows. Planting in rows can cause soil erosion whereas mounds help to retain moisture and soil fertility, encouraging strong, healthy plant growth. Healthy plants are more disease resistant. And grown together, they attract beneficial insects, which prey on those that are destructive. This system is known today as biological control.

A key partner in this project is the International North American Indian Association, who have a base in Edinburgh. They hold the view that all peoples share one Earth and so have a responsibility to keep abreast of environmental issues which affect us all. They monitor the effects of industry on wildlife in America, and the introduction of beaver and other species into the UK. The project is also closely linked to the Lenni Lenape Resource Centre UK, which provides information and advice about specific Native American cultures to schools and community groups; and the Lenni Lenape Historical Society / Museum of Indian Culture in Pennsylvania USA.

The Lenape people occupied an area of Turtle Island (as America is known to them) stretching from Delaware to Long Island New York. Named the Delaware Indians by white people, their own name for themselves, Lenni Lenape means 'original people' in Algonquin dialect. For 15,000 years before the arrival of Columbus they lived in small villages connected by a criss-cross of footpaths. They farmed, fished and hunted many species of animals and birds. To read the sad story of what became of the Lenni Lenape, please visit the website

Bringing the lessons home

Carla Messenger, Director of the Museum of Indian Culture, visited Newcastle in July 2002 to show an exhibition and give a series of talks to local school children about Native American sustainable lifestyles. The talks were held at Good Road in a polytunnel (polythene covered, tunnel shaped, plant-growing greenhouse) not unlike a Haudenosaunee Longhouse in construction. Carla talked about Native American technologies and cultures, including the re-use and recycling of plant and animal materials.

Steve Tinling showed me some artefacts of the type used by American Indians, including gardening tools made from a deer's jawbone and antlers. The antlers would be used for digging and the jawbone, complete with teeth, for removing grains of maize from the cob. He also showed me a great many

varieties of seeds from the types of corn, beans and squash grown traditionally by the Lenni Lenape and other tribes.

Seeds of Heritage, Seeds of Diversity

These are heritage seeds, in that they are not registered in seed catalogues and so cannot legally be sold in Europe; but they can be shared and grown quite happily. And many people consider it increasingly important to do so, saving seed each year and keeping these ancient, rare varieties alive for the benefit of future generations.

I am starting to notice seed-swapping events cropping up around the UK in early spring. Perhaps we can hope to see exciting varieties like these become more readily available. Networks are beginning to emerge of people keen to share not just the seeds of special plant varieties but also the heritage of stories that go with them – stories about how the plants grow and what they mean to us.

For as well as complementing each other in the garden, the three sisters have for centuries lived in harmony in the kitchen. Corn gives us energy food, and some protein to help us grow strong like her. But when eaten together with beans, the protein from the beans combines with that of the corn to produce maximum benefit in our diet. (Think of tortilla and refried beans – they go together just like rice and peas, dahl and rice or bean or toast!) Now add some juicy squash, full of vitamins, and you have the perfect balanced meal.

And it works in Wales too!

Since moving to Wales and getting a bigger garden, last year I decided to have a serious go at growing the three sisters. I did not have success starting the three seeds together in each pot. But I did manage to start of first the corn, then the beans and finally courgettes – a kind of squash familiar to Europe. I used ordinary packet seed from the shops. And they did very well together. We were lucky to have a lingering 'Indian' summer so the corn eventually ripened in September, and my family enjoyed a harvest festival feast of the sweetest corn you could imagine. I am sure my old Jamaican neighbour, Mr Peart, would be so proud of me, if only he were still alive to see my little raised beds, home-made organic compost and fine healthy crop of food.

Next year I hope to get hold of some heritage seed and contribute to the growing movement for conservation of plant diversity. You can get more information about plant diversity in an information sheet from Steve Tinling at Good Road.

Other contacts and resources

International Native American Indian Association , 9/2 Dunsyre House (North), 33 Calder Crescent, Edinburgh, EH11 4JH, Scotland tel. 0121 453 1046

Native Peoples Arts and Lifeways magazine Jan/Feb 2003 carries an article about ethno-botanical gardens in USA, showing Native ways with horticulture and cookery, including a recipe for fish baked in corn husks.

Earthly Joys and Virgin Earth, both books by Philippa Gregory, tell the story of John Tradescant and his son by the same name, English plant collectors in Virginia, and their encounters with the Native peoples. Published by Harper Collins.