

# Return To Your Roots



## **How a BioPonic Earth Food Forever Farm**

**Can Bring Healing & Prosperity  
To Aboriginal and Indigenous Cultures  
of North America**

We have all come from the same roots. We started in hunter-gatherer societies evolved into agricultural societies, moved to industrial societies and then to information societies. What is the next plateau on this ever linking chain of societal evolution no one can say for sure; but it's clear that for some of us there is a longing, a looking back at a past when we were closer to nature and much more involved in cultivating our own food. We were the agrarian society; and the earliest agrarians among us were the aboriginal and indigenous cultures of North and South America.

“Many of today’s modern garden crops and fruit were first grown six thousand to seven thousand years ago by the Incas of Peru, the Maya of Central America and the Aztecs of Mexico. These cultures were the first to grow more than 150 specie of plants such as corn, beans, certain varieties of squash, peanuts, peppers and tomatoes.”<sup>1</sup> “Some squash, however,



originated in what is now the eastern United States, including the summer squashes, such as the scallop and crookneck squash, acorn squashes and many familiar ornamental gourds. Roughly seventy-five thousand kinds of plants have some edible parts, and Native peoples of the world have used seventy thousand of these for food at one time or another.”<sup>2</sup>

The history of corn is a fascinating one as it took thousands of years to transform maize from a wild grass called Teosinte that originally grew in Central America 7,000 years ago into the staple food we recognize as corn today.

Teosinte kernels were nothing like our modern corn. They were small and not fused together. Native Americans encouraged the formation of cobs on early maize by collecting and cultivating the Teosinte. Over several thousand years, cob length and size grew until it was possible for a family to produce food for the bulk of their diet for an entire year from a small area. This changed everything by allowing a family to live in one place and become farmers.<sup>3</sup>



The Native Americans discovered that if they grew beans along with the corn on mounds of soil, the corn stalk would provide support for the bean stalks. Then they would plant melons or squash in the spaces between the mounds of corn and beans. The three main plants, corn, beans and squash complemented each other in the field and in their combined nutrition; and the Native Americans revered them.

Many varieties of corn, beans and squash are still the most important traditional garden crops in North America. These three plants were so important to the aboriginal and indigenous cultures of North America, they were given anthropomorphic qualities, and named the Three Sisters by the People of the Longhouse known as Iroquois. In this act of naming them, the Three Sisters became important members of the human family, which depended on them for their survival.

The indigenous and aboriginal people of North America were master farmers who had a great respect for the plants they were cultivating, the seeds they were saving and the earth they were care taking. “A garden, in Native North America, is not just a place to grow food. Taking care of a garden is one of the most important ways that people become a part of the great Circles of Life.”<sup>4</sup>

How in the past 50 years, we have all ended up as slaves to the industrialized food production corporations who feed us poison in place of nutritious healthy nutrient



rich food is a story unto itself. 250,000 acres of beautiful corn that it took native Americans thousands of years to perfect has been turned into a manmade nightmare of genetically altered genes that are herbicide resistant so pesticides and herbicides can be sprayed on these corn crops without killing them. We have allowed our food system to be taken over by these large corporations that have their eye on the almighty dollar. To get those dollars, our food has been bastardized, irradiated, filled with chemicals, pesticides and genetically engineered organisms. It's fake food and the health of the people is going downhill fast on this corporate freak food ride.

And nowhere is this health crisis more evident than on the Reserves of Canada and the Reservations of the United States. In what is known as one of the poorest regions in the United States, The Pine Ridge Indian Reservation located in South Dakota, death from Diabetes is six times the national average. According to the [Indian Country Conservancy](#), "Native People, especially children, suffer from chronic diseases like obesity, diabetes, and heart disease at epidemic rates that were unimaginable just a few generations ago. There are many causes for these illnesses, but a predominant one is poor diet."<sup>5</sup>

There are 310 Native American Reservations in the U.S. And typically, many of America's poorest people reside in them. These Sovereign Nations are 3rd World Countries within the U.S. The photos of Pine Ridge below reveal that the land the U.S. deemed worthy of Native Americans is not very good for growing crops.



Again the [Indian Country Conservancy](#), explains that “By the mid-20th century, two-thirds of the land guaranteed to tribes by treaties – over 100 million acres – was taken, primarily through federal allotment and termination policies, and almost half the land that remained was desert or semi-desert.”<sup>6</sup> Desert land isn’t known for producing healthy foods; but it is known for being able to support Aquaponics food growing systems that use 90% less water than tillage farming. More about that fact later.

As we did our research to write this report, we were puzzled by the dearth of information regarding Native American farmers either men or women in the 21st Century. There was lots of information and books and images about Native American agriculture in the past; but virtually nothing about their modern agricultural practices and no images depicting those practices. We found that very strange.

Here’s what happened in the U.S. to create this sad situation. Prior to white contact and just like in other undeveloped and developing countries, the Native American women were the center of agricultural activities. There were two kinds of tribes, the village-based Plains tribes like the Pawnees who grew crops and the nomadic

Plains tribes like the Crows and Lakotas (Sioux) who traded buffalo meat and hides to the farming people in exchange for vegetables. “Women, who were expert



Photo Courtesy of Illinois State Museum

geneticists, cleared the land and planted, cultivated, and harvested the crops, then stored the surplus in jug-shaped pits. They and other village-based Plains Indians, such as the Pawnees, used floodplain terraces for cropland.”<sup>7</sup>

Then came the white man and the 19th Century when Native American lands were taken, distributed to white settlers and Native Americans were placed on reservations. As we mentioned earlier, the reservation land was not of the highest quality for agriculture; but, nevertheless, missionaries and government agents attempted to teach Native Americans European American agricultural traditions. These government agents often directed their farming instruction to men, which violated the Native American culture; and they promoted the cultivation of wheat over maize and also insisted on row cultivation in place of inter-cultivation methods that had traditionally been used. The government also failed to provide adequate equipment, seeds, and training to enable the transition to the new system.

As more settlers arrived, more pressure was placed on land so the U.S. government in 1887 enacted the Dawes Act which allotted each head of a Native American household a plot of land, generally 160 acres, leaving the remainder of the reservations to be sold as surplus lands. This is one of the Acts which the [Indian Country Conservancy](#) maintains resulted in the confiscation of 100 million

acres of land originally promised to Native Americans. The individuals who took allotments were to receive title to their land after 25 years. The government proposed to teach Native peoples to become self sufficient farmers on their allotments; but once again, they failed to back the policy with the necessary resources. In 1906, the Burke Act was passed, which shortened the 25 year period to receive title to allotted land to 19 years. "Landowners who were declared competent received title to their lands and often sold it, a process that further hindered the successful development of Native American agriculture."<sup>8</sup>

# INDIAN LAND FOR SALE

GET A HOME  
OF  
YOUR OWN  
EASY PAYMENTS



PERFECT TITLE  
POSSESSION  
WITHIN  
THIRTY DAYS

## FINE LANDS IN THE WEST

IRRIGATED IRRIGABLE      GRAZING      AGRICULTURAL DRY FARMING

IN 1910 THE DEPARTMENT OF THE INTERIOR SOLD UNDER SEALED BIDS ALLOTTED INDIAN LAND AS FOLLOWS:

Location	Acres	Average Price per Acre	Location	Acres	Average Price per Acre
Colorado	5,211.21	\$7.27	Oklahoma	34,664.00	\$19.14
Idaho	17,013.00	24.85	Oregon	1,020.00	15.43
Kansas	1,684.50	33.45	South Dakota	120,445.00	16.53
Montana	11,034.00	9.86	Washington	4,879.00	41.37
Nebraska	5,641.00	36.65	Wisconsin	1,069.00	17.00
North Dakota	22,610.70	9.93	Wyoming	865.00	20.64

**FOR THE YEAR 1911 IT IS ESTIMATED THAT 350,000 ACRES WILL BE OFFERED FOR SALE**

For information as to the character of the land write for booklet, "INDIAN LANDS FOR SALE," to the Superintendent U. S. Indian School at any one of the following places:

<b>CALIFORNIA:</b> Reno Sacramento Yreka <b>IDAHO:</b> Laramie <b>KANSAS:</b> Fort Seward	<b>MISSISSIPPI:</b> Biloxi <b>MONTANA:</b> Crow Agency <b>NEBRASKA:</b> Macy Seward Washburn	<b>SOUTH DAKOTA:</b> Fort Totten Fort Yates <b>OKLAHOMA:</b> Ardmore Catoosa Lawton Muskogee Ponca	<b>OKLAHOMA - Contd:</b> Sapulpa Muskogee <b>OREGON:</b> Clatsop Agency Hood River Madras Seaside Warrenton	<b>SOUTH DAKOTA:</b> Cheyenne Agency Crow Creek Grand Coulee Pierre Pine Ridge Rapid City Sisseton Spearhead	<b>WASHINGTON:</b> Fort Simons Fort Spokane Tacoma Tule <b>WISCONSIN:</b> Onoda
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**WALTER L. FISHER,**  
Secretary of the Interior

**ROBERT G. VALENTINE,**  
Commissioner of Indian Affairs

When the depression hit, the U.S. government, to their credit, tried to help the Plains Indian farmers by giving them cattle to increase their herds; and several tribes organized livestock associations and were able to improve breeding and marketing practices. But when World War II ended, the prices for livestock and crops were in high demand and many whites were claiming that the land held by Native Americans was not being used to capacity to meet the needs of the country.

So, once again, a lot of pressure was put on the Native farmers to lease or sell their land. "After 1945 only the white farmers who could command the necessary capital and credit, and who had access to new forms of science and technology and large acreages, could earn a profit from commercial agriculture. Native Americans in the Great Plains remained subsistence farmers, if they practiced agriculture at all. In 1970, for example, only 9 percent of Native Americans on the North Dakota reservations of Fort Berthold, Fort Totten, Turtle Mountain, and Standing Rock were farmers or farm managers."<sup>9</sup>

As we come to the 21st Century, we sadly discover that on many reserves and reservations in the Great Plains, Native American agriculture has nearly ceased. Tribes have leased their reservation lands that are suitable to farming to white farmers and ranchers and millions of acres of the land allotted in the Dawes Act was sold back into the hands of whites passing out of the control of Native Americans. “The problems of government-imposed inheritance laws, which divided land holdings into tracts too small for profitable cultivation, and inadequate capital, credit, and education, as well as insufficient machinery, seeds, fertilizer, irrigation, and managerial experience, remain unresolved. As a result, most Native Americans in the Great Plains live in rural areas but are not farmers.”

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In Canada, this sad story is the same even though some of the terminology is different. Instead of Reservations, the land dedicated to the aboriginal people of Canada is called a Reserve; and there are about 617 Reserves throughout Canada. According to a report by Christina Comisson and aired on CTV NEWS in October of 2013, James Anaya, the UN’s special rapporteur on the rights of indigenous peoples said, “From all I’ve learned, I can only conclude that Canada faces a crisis when it comes to the situation of indigenous peoples.”<sup>11</sup>

And just like in the U.S., a major aspect of this Canadian crisis is a health crisis due to rising rates of diabetes, a disease that was rare there prior to 1940. “The rates increased rapidly after 1950 and have now reached epidemic levels in some communities. Higher rates of type 2 diabetes in children and youth and of gestational diabetes in females have also been observed. Moreover, earlier age at onset and high rates of complications amplify the problem within many First Nations, Métis and Inuit communities.”<sup>12</sup>

**Aquaponics World Food Forever™ Farms on reserves and reservations could bring back a legacy** that has been all but lost taking with it the heart of a culture that was so connected to the land and the cultivation of food by their women who held so much knowledge about it they were referred to as “expert geneticists”. When all was said and done, the men in the nomadic tribes were deprived of their ability to hunt wild game; and the women in the village-based tribes were deprived of their ability to cultivate crops. Native Americans, First Nation, Metis and Inuit People became dependent on the U.S. and Canadian governments for their sustenance which has resulted in illnesses like diabetes, heart disease and alcoholism several times the national averages in these two countries. Isn’t it time to heal these fractured cultures?

Three researchers in particular, R. and S. Kaplan and Roger Ulrich have long been arguing “that any garden is healing. However, to be defined as such, a healing

garden should give a sense of restoration from stress and have other positive influences on patients, visitors and staff/caregivers. These healing landscapes can be located indoors or outdoors, but to qualify as healing ‘gardens’ they should have real nature such as plants and/or water features.”<sup>13</sup> Plants and water features are what a Food Forever™ Farm is all about not to mention the copious amounts of nutritious healing fruits and vegetables that come out of these Garden Farms, which would naturally promote a new way of eating that would not be dependent on high fructose GMO corn syrup provided in government food.

“Healing landscapes have long been an important aspect of human life. When people first began erecting dwellings, healing places could be found within nature through sacred groves, special rocks and caves. In the Western world, monastic communities supported infirmaries that were based in the use of herbs and prayer and almost always included a cloistered garden. Modern advances in technology towards healing has largely diminished the importance of nature in the healing process and this has been one unfortunate result of the ‘cure over care’ phenomena found within many aspects of the healthcare field.”<sup>14</sup> Isn’t it time to bring healing gardens onto reserves and reservations? Aquaponics World Food Forever™ Farms are not only healing environments, they are profitable healing environments that can produce organic food fish, fruits and vegetables for the community.

We’ve looked at the problem. Now is the time to look at the answer; and an Aquaponics World Food Forever™ Farm is the answer. But what is an Aquaponics World Food Forever™ Farm? On second thought, a better first question is this: What is Aquaponics?

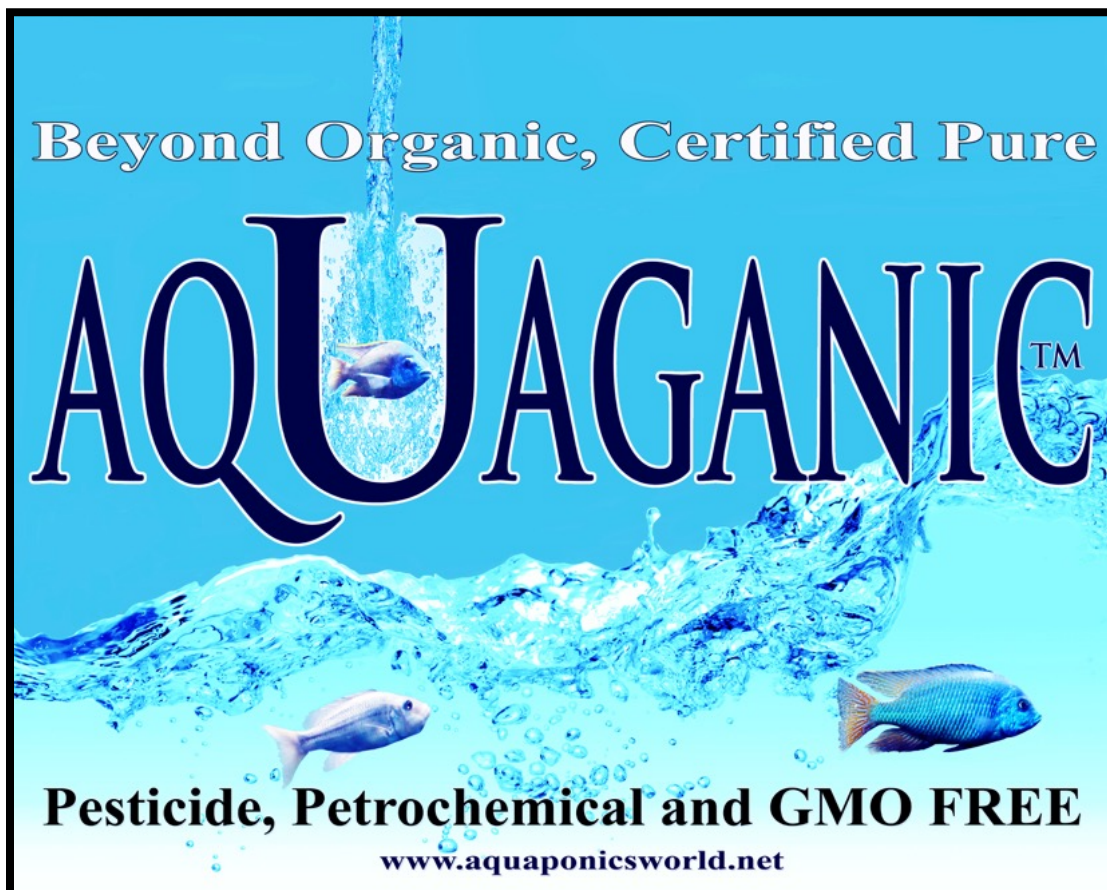
Aquaponics is a hybrid food growing technology combining the best of aquaculture (growing fish) and hydroponics (growing veggies without soil) in a cross-linked system that is completely organic because the fish waste is the natural fertilizer which means no pesticides, herbicides or petrochemicals. In fact, because the fish are like the canaries in the coal mine, you can’t use harmful chemicals of any kind as they would kill the fish. Aquaponics systems can’t be made from metal either for the same reason. The only metal that can be used in an aquaponics system is stainless steel. These food growing systems grow two crops, fish and plants, using 90% less water than traditional tillage farming.

So now back to the original question. What is an Aquaponics World Food Forever™ Farm? Food Forever™ Farms are sustainable, commercial-sized food growing systems that grow vegetables and food fish so fast we call it “SPEED Farming”. “SPEED” stands for Sustainable, Productive, Ecologically-Enhanced and Deliverable. Notice we’re saying “commercial-sized” not necessarily “commercial”. That’s because these Food Forever™ Farms have been designed

with two purposes in mind--to feed people in Developing countries and to grow food for the commercial market in Developed countries.

Developing country systems are shipped and assembled on-site while Developed country systems are built on site using local materials. In both cases, these systems feed large numbers of people for the least amount of investment money while being as durable and long-lasting as possible. Food Forever™ Farms are food growing farms that charities, church organizations, governmental, national or international agencies can purchase to assist villages, communities, reservations, reserves, prisons and universities in becoming more food independent and sustainable. These gardens of hope are where members of a food resource starved community or any communal group that is ready to step into growing their own organic, healthy, reliable food can learn to do it. The ultimate goal is that with good maintenance practices in place along with an education program, a Food Forever™ Farm can grow food for decades--food for the commercial market or food for food resource challenged communities.

Food grown in a Food Forever™ Farm is the most nutrient dense and healthiest food on the planet because it's beyond organic. We call it Aquaganic™ and have a US trademark by that name.



**Beyond Organic, Certified Pure**

# AQUAGANIC™

**Pesticide, Petrochemical and GMO FREE**

[www.aquaponicsworld.net](http://www.aquaponicsworld.net)

So here's how massive amounts of our delicious, nutritious food is grown outdoors in a Greenhouse. On this page is our Vertical Duffy Duct™ Growing System in action growing literally walls of Living Romaine Lettuce in an 8 x 28 feet, 224 square feet. Demonstration Greenhouse. We are able to grow about 2688 heads of Living Lettuce in just two inverted "V" Vertical Duffy Duct™ Systems annually with our current setup.

Now imagine how much lettuce or other leafy greens could be grown in a fully optimized Vertical Growing System 10,000 square foot in a greenhouse facility, which is one of the standard Food Forever™ Farm sizes we offer. The answer is 189,000 lbs. of veggies annually. If grown indoors using artificial light for 12 hours a day or supplemental light in the greenhouse then that yield goes up to over 250,000 pounds per year.





In our Indoor Growroom pictured above, which is the same size as our Greenhouse, we are growing Living Butter, Head and Black Seeded Simpson Lettuce in a Horizontal Duffy Duct™ System. In the photo above, you can also see Swiss Chard growing next to the Living Lettuce. These front plants are growing under a single Induction Grow Light. Induction Lights are fairly new in the indoor growing market; but are catching on quickly as they produce more light for less money and last longer than traditional Fluorescent Lights.

On this page, you can see our Living Head Lettuce, Black Seeded Simpson Lettuce and more Living Romaine all growing under T5 Fluorescent Grow Lights, which we will soon be exchanging for Induction Lights. We are also in the process of designing Vertical Indoor Growing capabilities.



The nutrient rich water from the indoor Fishroom, which sits next to this Growroom flows through this Horizontal Duffy Duct™ System to fertilize and grow these vegetables; and, as you can see, these veggies grow in dense proximity to one another. They also grow faster than traditionally grown vegetables.

On the this page, you see photos of this Growroom taken 22 days apart with the grow lights on for only 8 hours a day.



Aquaponics USA  
Photo Taken February 28, 2014



Aquaponics USA  
Photo Taken March 22, 2014

A massive amount of growth has taken place in less than one month making it possible for reservations and reserves to grow food for their communities as well as supply local restaurants and stores.

Here's what makes this all possible--the Fishroom, where the fish are the engine of the technology.



Our Micro Food Forever™ Proof-of-Concept Farm has five 120 gallon fish tanks with about 150 pounds of Tilapia swimming around in them. Tilapia are a delicious food fish and the second crop that comes out of a Food Forever™ Farm. A 10,000 sq. ft. Food Forever™ Farm would have eight, 1,400 gallon fish tanks with an annual production of nearly 6,000 lbs. of Tilapia.



Food Forever™ Farms are the future of agriculture for many reasons, the primary one being they can grow fruits, vegetables and food fish using 90% less water than traditional agriculture. The secondary reason this new food growing technology is gaining in popularity is this:

Food grown in protected Greenhouses and Warehouses are Rad Shielded meaning the food is protected from radiated Rain, Snow and Soil. This is important because one of our worst nightmares, the Fukushima disaster, really happened and continues to pump toxic and deadly radiation into our ocean and our air. That's why all of our labels have this Logo on them.



Here is our universal, worldwide brand, **zero**.



# zero<sup>TM</sup>

**Pesticides, Petrochemicals & GMO's**

## **Living Butter Lettuce**

Wash Before Serving  
Keep Refrigerated

**Beyond Organic Certified Aquaganic<sup>TM</sup>**  
**Locally Grown and Shielded from**  
**Radiated Rain, Snow & Soil**

[www.aquaponicsworld.net](http://www.aquaponicsworld.net)



- TEMPLATE KEY
- SAFETY AREA
  - TRIM / LIVE AREA
  - BLEED AREA

\*jakprints 2" x 2" Circle

We have a fully developed marketing and packaging program in place in the event a reserve or reservation wants to partner with us in selling the products produced from their Food Forever™ Farm, which will all be Certified with an Aquaganic™ Trademark seen as the 2” circular stick-on label ready for printing above.

A Food Forever™ Farm on a reserve or reservation would offer employment opportunities to a specified number of people depending on the size of the farm. Running a Food Forever™ Farm is a full-time business with a multitude of responsibilities including planting seeds, planting seedlings into Growing Beds, Harvesting, Packaging, Marketing and Sales of the products to name just a few.

A Food Forever™ Farm could be utilized as a rehabilitation facility to aide in the recovery of addictions and unsocial behavior as there is something magical that happens when people work with plants, witness them grow and eat healthy nutritious pesticide free food.

**There are two ways to go about purchasing a Food Forever™ Farm including:**

1. Paying for it outright understanding that there will be a significant ROI (Return On Investment) based on selling the products that the farm produces into the marketplace.

2. Working with Mr. Bob Vedder, the Gatekeeper of a unique Humanitarian Leasing Opportunity that has been broadened to include Aquaponics Systems for reservations in the U.S. (Canadian reserves are also being considered in this funding opportunity.) The reservation receives the funds to purchase their Food Forever™ Farm and works out a lease agreement to pay off the farm over an agreed upon period of time. The advantage of this choice is that the Food Forever™ Farm could be purchased quickly once the approved Leases receive their funds.

You can feel free to contact Mr. Bob Vedder at [gogreenbob@gmail.com](mailto:gogreenbob@gmail.com) or give him a call at 708-362-2251.

Feel free to contact us at 760-671-3053 to discuss your desire to purchase a Food Forever™ Farm.

If you would like to receive a detailed document entitled “How A Food Forever™ Farm System Works” or one entitled “The Big Marketing Picture” and are willing to sign an NDA (Non Disclosure Agreement) with us, feel free to make that request at:

[farmer@aquaponicsworld.net](mailto:farmer@aquaponicsworld.net)

We fully realize that every farm will be custom built so prices will vary according to your specific farm.

We would love to build an Aquaponics World Food Forever™ Farm either indoors in a warehouse, building or monolithic dome or outdoors in a Greenhouse on your reservation or reserve and help your community Return To Your Roots.

Sustainably,

Grace Sylke

Marketing Director

Aquaponics World, LLC

## Resources:

<sup>1</sup>Native American Gardening, Michael J. Caduto and Joseph Bruchac, Fulcrum Publishing, 1996.

<sup>2</sup>Ibid.

<sup>3</sup>Wikipedia. History of maize at <http://en.wikipedia.org/wiki/Maize>

<sup>4</sup>Native American Gardening, Michael J. Caduto and Joseph Bruchac, Fulcrum Publishing, 1996.

<sup>5</sup>Indian Country Conservancy website at <http://www.extrade.net/www-indiancountryconservancy-org.html>

<sup>6</sup>Ibid.

<sup>7</sup>Encyclopedia Of The Great Plains, [“Native American Agriculture”](#)

<sup>8</sup>Rural Marketing, [“Women farmers are pivot of Indian agriculture, says Agri Min”](#)

<sup>9</sup>Encyclopedia Of The Great Plains, [“Native American Agriculture”](#)

<sup>10</sup>Ibid.

<sup>11</sup>CTV News Canada at <http://www.ctvnews.ca/canada/canada-faces-a-crisis-on-aboriginal-reserves-un-investigator-1.1497612#ixzz2xGzX4AGh>

<sup>12</sup>Public Health Agency of Canada at: <http://www.phac-aspc.gc.ca/cd-mc/publications/diabetes-diabete/facts-figures-faits-chiffres-2011/chap6-eng.php>

<sup>13</sup>Healing Gardens by Cooper, Marcus and Barnes. Published in New York by John Wiley & Sons, 1999.

<sup>14</sup>University of Washington Publication at: [http://depts.washington.edu/open2100/pdf/2\\_OpenSpaceTypes/Open\\_Space\\_Types/healing\\_gardens.pdf](http://depts.washington.edu/open2100/pdf/2_OpenSpaceTypes/Open_Space_Types/healing_gardens.pdf)