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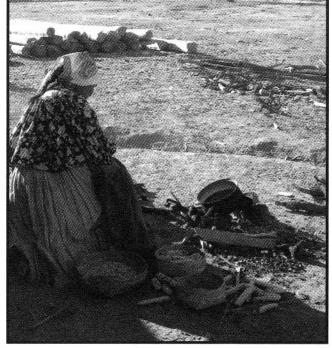
Summer Solstice 2007

# the Seedhead News

# The Mexican "Tortilla Crisis" of 2007: What future for small-scale farmers and maize landraces?

#### by Alder Keleman

Up until a few months ago, Mexican maize farmers' economic situation was frequently summed up in a short, succinct phrase: el maíz no es negocio. These words translate literally to "maize is not a business," expressing the observation that maize offers little-tono commercial gain. However, since late December of 2006, events in both the domestic and international maize markets appear to be changing the landscape of maize production in Mexico. These events promise to make maize more profitable, but nonetheless herald an uncertain future for the small-scale producers who steward native maize landraces.



What were the causes of this price increase? Observers have pinpointed several possible factors. The most frequently blamed culprit is the increase in the price of maize in the US, where recent emphasis on the production of ethanol to decrease dependence on foreign oil has led to the highest prices and largest areas of maize planting since 1944. As the story goes, these increases were paralleled by the price increase within Mexico.

Although this basic outline holds, the story in Mexico is more complex.

In fact, it was not the price of maize itself, but rather the price of the tortilla, which sparked the "crisis" of recent months. In late December of 2006, tortilla prices began to rise, reaching levels of 10 pesos/kilo (~41 cents/pound)' in Mexico City, and reported to climb as high as 15 pesos/kilo (~62 cents/pound) in some rural areas. This marked an increase from approximately 6 pesos/kilo a year before. For families surviving on minimum wage, which currently hovers around 50 pesos (\$US 4.55) per day, these price hikes denoted a significant impact on households' ability to acquire a sufficient supply of this basic dietary staple.

Particularly significant are the dynamics of the 2006 maize harvest from the state of Sinaloa. As the largest maize-producing state in northern Mexico, Sinaloa's summer harvest surplus typically supplies the center and south of the country until the spring harvests from these regions are available. In the fall of 2006, with signs already apparent that maize prices were on the rise, Sinaloan farmers attempted to seek higher prices from their buyers in the south of the country. Met with unwillingness to pay the market price, they instead acquired an export permit for up to 500,000 tons of their 2006 crop.

#### continued next page

ABOVE Tarahumara woman popping corn. Photo courtesy Suzanne Nelson.

## Tortilla Crisis continued

Reports also suggest that, in the fall of 2006, a significant part of this harvest was sold to the two major industrial tortilla-flour producing companies at prices between 1,350 pesos and 1,650 pesos/ton. These same companies and their affiliates would sell this grain in the center of the country at around 3,500 pesos/ton by January of 2007, representing a 150% increase, and provoking accusations of market speculation.

Finally, observers have also placed blame on the disperse structure of the tortilla industry. Mexicans tend to purchase freshly made tortillas in small, corner store-type *tortillerías*. Each individual *tortillería* must pay a set of fixed costs, including machinery, electricity, and water. The price of petroleum is also factored into the cost of transporting the industrialized maize flour that most

*tortillerías* elaborate. These prices were rising in late 2006 and early 2007, a factor which, magnified by the large number of *tortillerías* in the country, likely influenced the price increase, particularly in remote or rural areas.

At first, the Mexican government was slow to respond to these circumstances. Having made campaign promises to adhere to free-market policies, the incipient administration of President Felipe Calderón Hinojosa expressed the opinion that direct market controls of the tortilla price were inappropriate, and that the crisis should be allowed to resolve itself as consumers shifted their demand to other, cheaper substitutes for tortillas.

However, following major protests in Mexico City in the early weeks of January 2007, it became politically infeasible for the Calderón administration to refrain from action. On January 18, Calderón called a meeting of the major leaders of the agricultural and food industries in Los Pinos, the Mexican presidential residence. These included representatives of Wal-Mart Mexico, Grupo Maseca (the largest producer of processed tortilla flour), and Bimbo (a major producer of processed wheat-flour goods). The result of this meeting was an agreement that these companies would voluntarily cap tortilla prices at 8.5 pesos/kilo, and similarly hold the price of maize grain at 3.5 pesos/kilo in Mexico City. Calderón also announced that he had agreed to raise import quotas for 2007<sup>2</sup>, allowing the entry of more cheap grain from the US, and that he was planning for the creation of a "strategic reserve" of maize grain, in order to deflect the impacts of unforeseen scarcity in the future.

These solutions were not without their critics. Some suggested that the price caps were merely a "gentlemen's agreement," pointing out that the businesses involved in this agreement represented only 5,000 points of tortilla sale out of some 65,000 in the country. Indeed, a week after the agreement was announced, tortilla prices in Mexico City still hovered around



ABOVE & FAR RIGHT **Stockpiles of harvested corn.** RIGHT **Tarahumara women shelling corn.** *Photos courtesy Suzanne Nelson.* 

9.5 pesos/kilo, but nonetheless, the immediate political and economic crises had been deflected.

In the wake of these events, three major questions remain unanswered. First and foremost, is it possible that such a crisis could repeat itself in the future? Some (notably Lester Brown of WorldWatch in a 2006 editorial in Fortune magazine) have argued that the current emphasis on corn-based fuel ethanol could provoke food scarcity worldwide.3 A forthcoming report from Oxfam argues that Mexico's current food policy does little to reduce such risks. While in the latter part of the 20th century Mexico had an extensive system for regulating the price, purchase, storage, distribution, and industrial processing of maize and maize products, this organization (CONASUPO) was dismantled in the 1990s as the government moved toward a freemarket economic philosophy. Now, as the events of recent months have demonstrated, the market is essentially controlled by large corporations, and the supply of maize has been left without a buffer from international market fluctuations. question that Mexican citizens find themselves faced with at present is, is a "free" market dominated by large corporations the most appropriate, effective, or desirable system for regulating the provision of basic staple goods?

A second question to be considered is how these circumstances will impact poor, small-scale producers. It is difficult to imagine that an increase in the price of the commodity itself will be anything but positive. However, maize production in Mexico operates under highly imperfect market conditions; while the vast majority of producers farm less than 10 hectares, producers farming larger areas generally have better access to credit, technical assistance, government support, or civil-society sup-



port organizations. Among small-scale farmers, lack of access to transport infrastructure, and lack of current information on market prices frequently allow middle-men to garner a significant proportion of farmers' potential profit. In other words, without significant steps to address these problems, an increase in the price of maize alone does not guarantee that poor, small-scale maize producers will benefit.

A final and related question is what the impacts of these circumstances on native maize landraces will be.<sup>4</sup> In recent years, the government-sponsored promotion of large-scale industrial production has also heralded an increased tendency toward the use of high-yielding varieties. This same pattern has been accompanied by an amplified "rural exodus," in which young people in particular exit farming in search of more profitable activities in Mexican cities or in the US. These circumstances have particularly impacted the small-scale farming communities that tend to steward native maize landraces; even in communities where farmers continue to maintain their traditional varieties, few young people embrace the agricultural lifestyle, raising doubts as to whether the same traditions (and germplasm) will be carried on in one or two generations' time. In other words, even if recent events once again turn maize production into a "profitable business" in Mexico, it remains questionable whether this new market environment will actually prove favorable for the preservation of maize genetic diversity, or of the agricultural livelihoods of the farmers who steward it.

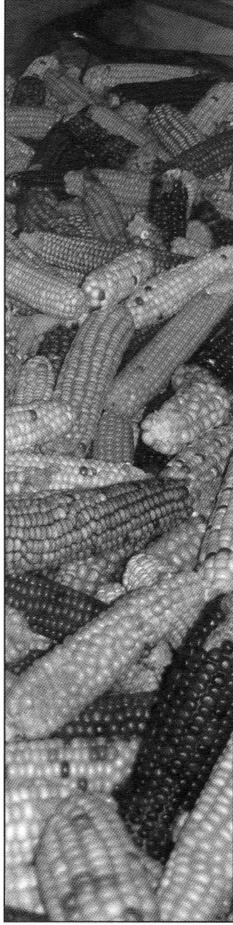
This article is based on research currently being undertaken at the Colegio de Mexico by Alder Keleman and Hugo García Rañó. For more information on a forthcoming report please contact alder.keleman@gmail.com.

<sup>1</sup> The price in US dollars was calculated at the time of writing, in mid-April 2007. However, the conversion would have been a few cents higher in January of 2007, as the peso was stronger against the dollar prior to the "crisis."

<sup>2</sup> Under the North American Free Trade Agreement (NAFTA), the Mexican government was allowed a 15-year period in which to enforce import quotas prior to the complete liberalization of the maize market. 2007 is the last year in which these import quotas are valid.

<sup>3</sup> Brown cites a figure suggesting that, with the grain needed to fill one 25-gallon SUV tank with ethanol, one person could be fed for a full year.

<sup>4</sup> In fact, following NAFTA, the explicit government policy was to reduce the population in the countryside to a level congruent with agriculture's contribution to the GDP. This implies reducing the rural or agriculture-employed population to around 6% from the 40% that this sector represented when NAFTA came into force in 1994.



## **Conservation Update**

by Suzanne Nelson

Another summer season is upon us and we're busily trying to figure out this year's growout plans. Seems like seed has been flying out the doors of the Fourth Avenue store and all kinds of requests for seed donations from gardening groups, elder programs, and other community efforts have resulted in a dwindling supply of seeds. Competing needs for seeds have made planning of what gets grown, how much of it gets grown and how it gets grown widely complex. It used to be a pretty easy process planning for the summer growouts — what was the oldest seed needing to be grown? There were plenty to choose from!

This year, we'll be trying a very different approach to our growouts. We still have regenerations to be completed; this year we will be growing the remaining accessions of our melon and watermelon collections, about 37 accessions. We'll also be regenerating our entire chiltepin collection, about 34 accessions. Once we've included a few other small groupings for regeneration, it gets more complicated.

Most of the rest needs to be grown for a wide diversity of reasons: 1) seed sales through the catalog, store and website (all those varieties you can't order because we didn't have sufficient quantity to offer them), 2) supporting our free seed program to Native American gardeners, 3) providing more diversity and quantity of food items such as pound bags of beans or dried herbs, 4) participating in local farmers' markets, 5) providing limited produce to local restaurants, 6) research (such as continuing selection for a blue sweet corn variety), 7) providing whole fruits or sufficient quantity of crops to RAFT-sponsored events, 8) growing specific crops to be distributed as part of a new effort to reintroduce traditional maize varieties in communities where it has been lost, such as in the Mayo region of southern Sonora, 9) production of crops requested by individual Native American communities, including the Tarahumara and Zuni, and 10) larger quantities of sufficient varieties for expanding wholesale seed sales.

This widely divergent list of needs produced a widely divergent list of crops to be grown - too many of the same species to put everything together in one spot (problems with cross-pollination) but not enough to warrant large-scale hand pollinations. This means we'll be planting about 150 different crops in a number of small plots (1/2 to 1 acre) scattered across the 60acre Conservation Farm, rather than the typical large-scale fields of 3 to 4 acres. It provides a challenge in terms of field preparation, irrigation, cultivation, and harvesting, not to mention ensuring cross-pollination still doesn't occur. We strategically placed the plots around the Conservation Farm with an eye to our typical wind patterns, mostly blowing from the southwest to the northeast. We're also planting buffer rows of sorghum around each plot to serve as pollen barriers. The few insect-pollinated crops being grown have been placed in plots at opposite ends of the farm, which stretches nearly one mile along its longest axis.

Though it requires more planning and upfront preparation to implement, we're actually looking forward to a more 'gardenlike' approach to the season. And more opportunities to actually enjoy the fruits of our labors — imagine taste testing all those chiltepines! Hopefully the melon and watermelon will provide a palate-cooling counter-experience.







CLOCKWISE FROM PREVIOUS PAGE Squash blossom. Agaves thrive after being placed in a shade house. A single wild squash is all that germinated from our old collection. Flowers of wild tepary. Photos courtesy Suzanne Nelson.

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Friends and supporters joined our emcee Mary Irish, celebrated garden writer, lecturer, educator and NS/S board member, at the University of Arizona Grand Ballroom for a special evening of community, traditional foods, and commitment to native seed conservation. Guests dined on a mouth-watering array of diverse culinary treats prepared with local and traditional ingredients by the award-winning chefs of Redington Catering. Among the selections were juniper berry marinated plank salmon; bison ragout with blue corn biscuits; posole with chayote, dried cherries & pecans; mesquite dusted turkey medallions with spicy pumpkin-corn sauce; flamebroiled chicken breasts with serrano-piñon butter sauce; squash & bean medley au gratin; and wild rice pilaf with sun-dried cranberries & toasted pumpkin seeds. The evening included a social hour in the Diamond Atrium featuring



live music by classical guitarist Charles King, which was followed by dinner and the evening program in the Grand Ballroom.

Highlights of the evening included a joyous poetry reading by Ofelia Zepeda, regents professor at the University of Arizona and NS/S board member, a noteworthy presentation by Suzanne Nelson, NS/S Conservation Director, and a timely and significant keynote delivered by David Yetman, nationally known author and host of the PBS television series, The Desert Speaks. A special performance of traditional songs and dance was performed by the Ha:san Traditional Singers from Ha:san Preparatory & Leadership School, led by school advisor Lois Liston.



# **Running Seeds in the Sierra**

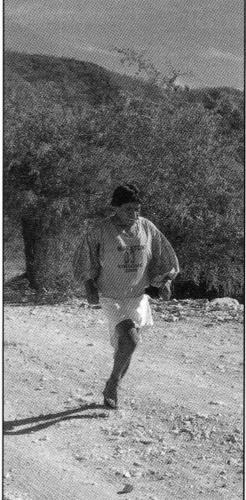
For several years now, a small group of strong-bodied, long-distance runners from the U.S. have made their way into the depths of Copper Canyon to run marathons with local Tarahumara runners. Together, the American and Tarahumara marathoners endure hours of fast-paced running along a narrow, dusty trail long used by the Tarahumara. Long distance running is a way of life for the Tarahumara — or Raramuri, as they call themselves.

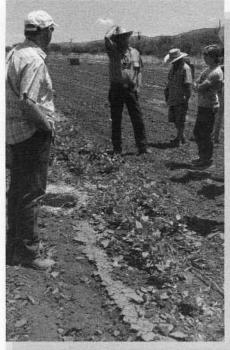
Organized by long-time running officionado, Micah True, the races are mostly designed to simply bring together two different cultures through the shared experience of running. Days leading up to the event are spent getting to know each other — as well as the trail and terrain. Friendships are made. Stories exchanged.

Recently, this group (otherwise known as the Mas Loco Club) has embarked on a new campaign to help their friends and co-runners — the Tarahumara. Through the early efforts of NS/S's co-founders — Barney, Mahina, Gary and Karen — our Seed Bank houses many collections of diverse crops from the Sierra Madre, home to the Tarahumara. With 'seed money' donated by members of the Mas Loco Club (and their friends), we've initiated the Batopilas Canyon Seed Reintroduction project — growing out specific Tarahumara crops, the seeds of which can be distributed or 'reintroduced' into communities where they were once commonly grown.

It is a unique partnership, birthed from the heart-felt desire of a group of 'crazy gringos' to help people who have little, ask for less and share immensely of themselves, their culture and lands. For more information about the Mas Loco Club or to see photos from previous runs, visit **caballoblanco.com**, **www.barefootted.com**, and **www.allwedoisrun.com**.

ABOVE Friends and amigos — the pre-race group. RIGHT Tarahumara runner nearing the finish line. *Photos courtesy of Evelyn Rens.* 





### **Upcoming Events:**

San Juan's Day Celebration Sunday, June 24, 2007, 10 AM TO 1PM

See back cover for more details!

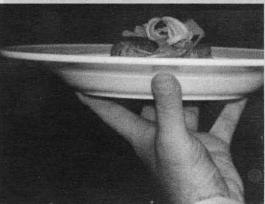
#### Native Seeds/SEARCH 3rd Annual Home Garden Tour

SUNDAY, SEPTEMBER 23, 2007, 8am to 12noon

Cost: \$6 for NS/S members; \$8 for non-members. For tickets, directions and full details, call 622.5561 beginning August 1, 2007.

#### **Annual Arizona Harvest Dinner** Date: TBD





Join us at Janos Restaurant located on the grounds of the Westin La Paloma Resort for this benefit dinner hosted by award-winning chef and NS/S board member Janos Wilder. The menu, created especially for this event, features native and traditional foods. Look for full details in our Fall Equinox 2007 newsletter. Seating is limited so make your reservations early for this amazing evening!

# **2007 Harvest Awards:** Nominate Someone Who Inspires You

**Glynwood Center's 5th Annual Harvest Awards** recognize innovative farmers, organizations, and businesses from across the U.S. that are doing an exceptional job of supporting local and regional agriculture. The goal is to encourage this growing movement by inspiring others to take action within their own communities. *Please help us recognize outstanding work from around the country by nominating someone whose work you admire.* This year's categories will include a Farmer Award, Good Neighbor Award, and Connecting Communities, Farmers, and Food Award. Additional categories will be announced on June 4, 2007. The deadline for nominations is July 17. To receive nomination forms and final award categories when they become available, please contact Kim Vargo at kvargo@glynwood.org or 845.265.3338. For more information on Glynwood Center or past Harvest Awards winners, please visit their website at www.glynwood.org.

# POETRY BY ED MENDOZA

Editor's note: Ed Mendoza is a farmer and former NS/S Board Member. He currently works at District 5 on the Gila River Indian Reservation, promoting the production and use of traditional crops.

# Our Seeds

#### by Ed Mendoza

The seeds have been planted, in me,....in you. Ready to sprout, waiting for rains blessing.

A monsoon season, and then we see the critters, the frogs, bees, gnats and the flies. The buzz is in the air.

And the seeds break from the crust of the soil, emerging from the womb toils of the earth, blistered hands, bleeding heart.

And the tears come, as the rains stop. The flower closes, missed by the bees, it turns back to the soil, to feed another dormant seed, in another rainy season.

So it is, forever gone, you and me, of memories within and generations.

Adopting a tradition of notes, a rhythm, the music of rain. And God knows, Great Spirit knows, and the code of memory, it's in the seed.



# Roadrunner

by Ed Mendoza

under my trailer down the dirt road they jump on my vato pointed tail feathers

and then down south they get hit on the road a prayer and the memorial

as our loved ones have gone we remember them in the village we eat four prayers

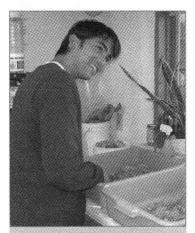
and yet we pick the fruit saguaro fruit and ceremony time is near the new year

two rabbits for supper as the child of the desert learns and one goes to boarding school a prayer again god help us

Remember NS/S in your will

You can support the work and values promoted by Native Seeds/SEARCH by including the organization in your estate planning. Your gift will express, in a lasting way, your commitment to our efforts to conserve the agricultural heritage of this region. If you would like to know more about how to designate Native Seeds/SEARCH in your will, please contact Julie Evans at **jevans@nativeseeds.org** or 520.622.5561.

We would like to thank and recognize anyone who includes NS/S in a will, but we can't unless you let us know. Please contact us so we can appropriately express our gratitude (or answer any questions).



### Volunteer Opportunities:

Contact Diana Peel, Community Relations Coordinator, at **dpeel@nativeseeds.org**, 520.622.5561 or fill out a volunteer form online at **www.nativeseeds.org** 

# Regularly scheduled volunteer days:

Wednesdays, 10am to 2pm The Conservation Center Seed Bank, 2130 N. Alvernon Way, Tucson, Arizona Seed cleaning, record-keeping, germination tests

#### Everyday

Fourth Avenue Gift Shop/Distribution Center, 526 N. Fourth Avenue, Tucson, Arizona Package seeds, bag beans, chiles and other native foods

# Other volunteer opportunities:

Gift Shop Clerks Weekly Office Assistant Special events support

#### Conservation Farm in Patagonia:

Volunteers needed from mid-May through September. Contact Diana Peel at dpeel@nativeseeds.org to be added to the schedule.

# News & Notes

#### Comings

三部に現合理に通

After 4 short years, we say adios to **Peter McCrohan**, our Conservation Farm Supervisor. Peter moved to Patagonia after spending many years in southern California, where he managed a cut-flower farm. His sense of humor and hearty laugh will be greatly missed but he remains in the community so we hope our paths will cross often! We wish him the best of luck in his new endeavors.

Welcome to our two new Conservation Interns, **Alex Coyle** and **Gabriel Vega**. They are the first in our new program to offer year-round paid internships in crop genetic resource management. Both Alex and Gabriel will be working mostly at the Conservation Farm, though they will be learning about all aspects of managing *ex situ* resources. We very much look forward to them working as part of the NS/S team! Welcome!

### Spread Kindness—Ben's Bells

In late March, **NS/S staff at the Seed Bank office** (otherwise known as Sylvester House), found a wind chime strung of brightly colored ceramic pieces and a single bell hung in one of the trees near the parking lot. It contained a simple note, "You have found a Ben's Bell. Take it home, hang it in your yard, and remember to spread kindness throughout your world."

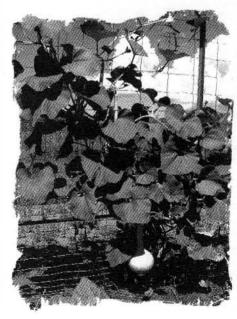
Ben's Bells is a non-profit organization whose mission is to inspire, educate and motivate each other to realize the impact of intentional kindness and to empower individuals to act according to that awareness, thereby changing our world. It was founded by Jeannette Mare-Packard in response to the kindness that helped her and her family to survive the tragic death of her young son. For more information on Ben's Bells, please visit their website at **www.bensbells.org**. We are honored to have a Ben's Bell hanging in the yard at Sylvester House.

### Thank you!

An Award of Merit from Seed Savers' Exchange was recently awarded to **Suzanne Nelson** and **Kevin Dahl** in recognition of their many years of effort at helping to preserve genetic diversity. The Award of Merit medallions are hand-crafted by Amish craftsmen using veneer red oak with a burned image of the barn at Seed Savers' Heritage Farm. Congratulations and thank you for all your efforts at helping to preserve genetic diversity!

#### Wishlist

- Lightweight 6 ft. folding tables
- Lightweight, folding display easels
- & Folding chairs, new



### Sow the Seeds of Conservation

Join Native Seeds/SEARCH, renew your membership, or, give a gift membership and contribute to our work conserving, distributing, and documenting the adapted and diverse varieties of agricultural seeds, their wild relatives and the role these seeds play in cultures of the American Southwest and northy Mexico.

Join, renew, or give online at www.nativeseeds.org, or, fill out the form a mail with payment to Native Seeds/SEARCH, 526 N. Fourth Avenue, Tucs AZ 85705.

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#### the Seedhead News

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San Juan's Day Celebration!

Please join us for our annual traditional blessing for the crops & fields at the NS/S Conservation Farm, Sunday, June 24, 2007 from 10am to 1pm.

Come tour the farm, help out with a project and learn what we're growing this year!

### Whatto bring...

A dish to share for the potluck lunch (drinks, cups, plates and eating utensils will be provided), sturdy shoes, a hat, sunscreen, water bottle, and a friend or two new to NS/S to enjoy the day!

# How to get there ...

**Directions to the NS/S Conservation Farm from Tucson:** Take I-10 east for 25 miles, exit at Highway 83, the Sonoita/Patagonia exit. Continue south for 25 miles. In the town of Sonoita turn right towards Patagonia onto Highway 82. After approximately 12 miles look for the green "Welcome to Patagonia" sign on your right. Immediately take the next left onto San Antonio Road. The sign above the entrance reads *Red Mountain Ranch*. Drive across the wash. The big, green barn will be on your right. Volunteers will direct you where to park.

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