#### Community Garden Locations

#### **Chaverim Garden (Eastside)**

5901 East 2nd Street Site Coordinator-Signa Roswall 520-750-8439; alamo@dakotacom.net

#### Corbett Garden (Eastside)

5948 East 30th Street Site Coordinator-Naniloa Smith 520-760-8579; naniloa@velocityhsi.com

#### Presidio Garden (Midtown)

Off Fort Lowell and Country Club Site Coordinator-Sally Coulthard stan@coulthard.net

#### Wilson Garden (Midtown close to UA)

3331 North Wilson Site Coordinator-Melissa Urreiztieta 520-320-9814; melissa.u@earthlink.net



### Featured Photo



Accusations that certain plots in the Wilson garden are groundless have no basis in fact.

## Community Gardens of Tucson

2940 North Santa Rosa Place Tucson, Arizona 85712 520-795-8823 www.CommunityGardens of Tucson.org



These bags of used coffee were spotted recently in Jacques' plot. We expect his plants to perk right up this spring.

#### Volume 7 - Issue 1

# Community Gardens of Tucson

a bimonthly guide to community gardening activities in the Greater Tucson area

#### INSIDE



#### CONTACTS

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Taking Advantage of Microclimates

Gardeners in the desert southwest are obsessed with temperature. Whether we're cursing 110-degree summer days or crossing our fingers against the surprise frost, the subject of mercury rising or falling is one we regularly reflect on, inquire about, and discuss at length. For all our attention, outside the greenhouse, temperature is the parameter of cultivation we can affect least, which isn't to suggest that we shouldn't try. By manipulating the conditions of microclimates, we can adjust the temperature in our plots by as much as 15 degrees, expanding the limits of growing seasons and encouraging maximum crop production.

Microclimates are the specific conditions such as temperature, exposure to sun and wind, and soil moisture retention, as they exist in small, specific areas. The physical conditions that affect a microclimate include orientation to the sun, proximity to protective structures, and topography. The principles of microclimate planting will sound familiar to anyone who has spent time coaxing plants from the soil: northern exposure correlates to shade and lower soil temperatures, higher soil moisture, and increased exposure to northern wind; southern exposure correlates to direct sun and higher soil temperatures, lower soil moisture, and increased exposure to southern wind; western exposure usually means increased afternoon heat and low soil moisture; and eastern exposure provides morning sun all year long in exchange for lower afternoon temperatures and higher soil moisture.

The effects of microclimates are minimized in most CGT gardens by the design and placement of garden plots, which are oriented in narrow rows that stretch from north to south. This prevents one gardener's corn crop from shading another's peppers. However, you can create microclimates within your plot, manually adjusting temperatures and coaxing the greatest yield from your plants. Here are some suggestions to get you started.

- 1. Plant your plot in blocks or squares instead of long rows; this provides the greatest flexibility in microclimate creation.
- 2. During the warm season, plant tall crops requiring full sun immediately south of shorter crops that require shelter from summer sun. During the cool season, reverse this arrangement.
- 3. Erect or establish, in or near your plot, protective structures that can mitigate the effects of extreme temperatures. (see *George Says* on Page 2)
- 4. Don't overlook the importance of topography, which affects air circulation. Cold air will sink to the lowest point in a garden. If your plot is in such a low point and frost threatens, you may need to take more aggressive protective measures, such as covering your plants.

You may recognize significant results from the adoption of these practices, but the best way to gauge whether your efforts have made a difference is to take measurements. Measure soil temperature and moisture in various locations throughout your plot, and don't forget to record your measurements in your garden journal.



## George Says ... by George Brookbank

We had November and December frosts and we must surely get January and February frosts too. In between these cold nights we'll have sunny days and our plants will grow, but slowly.

There is a way to get them to grow a little faster and that is by building a temporary greenhouse over your plot. Get the sturdy square-meshed metal that you used to contain your tomatoes and lay it on its side and anchor it into the ground to make an arch that is about four feet tall. Cover this with clear plastic and put bricks on the edges to stop it being blown away. The ends need to be completely (but temporarily) sealed.

You'll find pictures of this structure on pages 14 and 15 of my book "Desert Gardening" that will help you to realize what is intended. A picture is worth a thousand words and there are two pictures, with others on other pages.

The tunnel is kept closed at night after it has trapped

the sun's energy the previous few hours. If the days are extra warm it will be necessary to open one end (or perhaps both) at noon to prevent overheating. An advantage of a tunnel in winter is that it also traps moisture, which condenses on the underside of the plastic and falls back onto the soil. This saves water. A tunnel is a volume of warm air so don't think the plastic is a good cover for your plants. In fact it's the worst and you

should not cover your plants with it. A heavy cloth sheet or a light blanket can be used for night protection and it should be taken off when the sun comes out

so the plants get direct warmth from the sun. And put on again at dusk if it's going to be a frosty night.

My summer's task is to test some varieties of spinach in my plot at Presidio Garden. I grew plants from seed in my greenhouse, but things have not gone well. My plot is full with a few plants each of ten different varieties but the plants are small and I don't suppose they'll grow well until warmer weather. I know there are better spinach growers amongst us. Some of you have better plants and I'd like you to help with the trial by keeping a "Spinach Diary" and let me have your opinions on what you grew at the end of the season. It would be helpful if you record the date you planted (or seeded), the variety and its origin (seed catalog or nursery), whether it tasted good or not, and the yields. The last observation will be sort of rough without actual measurement, say "not much", "fair amount", "a lot", and so on.

Can you help?

January and February are quiet months with plants' growth slowed down and not much opportunity for planting or sowing. March is the beginning of the

spring planting season and soil preparation time. Many of you have done very well with soil improvement and if your broccoli and cabbage are dark green in color your soil has plenty of nitrogen in it. You could, in that case, add only half the usual amount of steer manure when the time comes. Compost might be a better material to use, to physically lighten the soil structure without adding to its chemistry.

I wish you a Happy New Year. And it was a

good gardening year for us all. Give thanks for the good year.



-George

## **Book Review**

Handbook of Microbial Fertilizers. Ed. M. K. Rai.

New York, N.Y.: Food Products Press, 2006. 541 pp.

The above title may well pique the curiosity of gardeners. Its applications, however, extend well beyond gardening, encompassing nursery practices, agriculture, and even forestry. If one can get past the often technical language of this multi-authored work, it holds potential interest to anyone wishing to educate themselves about food production and related opportunities and challenges.

Simply put, a microbial fertilizer, or biofertilizer as it is widely known, can be defined as a preparation containing microorganisms that aid in making nutrients available in a form that can be taken up by plants. Why use biofertilizers? The growing world population has increased food demand and, with it, pressure to boost food production. In recent years, conventional chemical fertilizers have in large part aided in this effort, but at the same time they present environmental and health hazards. Societies around the globe now face a major challenge as they struggle to balance the need to maintain adequate food production with the need to protect the environment. Biofertilizers offer a way to reduce dependence on conventional fertilizers while still increasing crop yields.

In twenty chapters, the book covers types of biofertilizers, including bacterial and fungal, and provides an explanation of the processes involved in converting nutrients into plant-usable form. Nitrogen and nitrogen-fixing bacteria are discussed. In its coverage of food production applications, the book takes an extensive look at rice cultivation and associated practices. Beans and other legumes also receive treatment. Finally, the last chapter deals with the matsutake mushroom, a delicacy once plentiful in Japanese forests, where it has traditionally been harvested, but now increasingly scarce. The chapter explores ways to boost production of this valuable mushroom in Japan and elsewhere.

Review by Cindy Coan, Indexing By the Book (www.indexingbythebook.com)



As always, we extend our warm thanks and appreciation to our friends at AlphaGraphics who not only make the publication of this newsletter possible, but make it beautiful as well.

I associate the garden with the whole experience of being alive, and so, there is nothing in the range of human experience that is separate from what the garden can signify in its eagerness and its insistance, and in its driving energy to live—to grow, to bear fruit.

—Stanley Kunitz

# Garden Reports

#### Chaverim Garden

After a brutally hot summer, I think we were all ready for the weather that makes gardening fun again. Alas, this year seems to have gone from "too hot" to "too cold" with very little in between. For a few weeks, we had the sort of blissful temperate weather that makes you optimistic about a late-season tomato crop; next thing you know, a frost set in and killed virtually all the vines. On the bright side, some gardeners have had great success with ripening their green tomatoes between layers of newspaper (George recommends adding a couple slices of apple to accelerate this process). Fried green tomatoes are also an option. Lettuce, spinach, and the cruciferous vegetables are doing well, though, assuming you had the foresight to plant them at the tail end of the endless summer. Peas and beans seem to be in a bit of a holding pattern, but hopefully they'll adjust to the winter conditions and take off again. The ever-helpful pill bugs have slowed to a crawl, poor things. Is it silly to wish for warm weather in Tucson? ~Jennifer

#### Corbett Garden

THANK YOU Community Gardens of Tucson for the gift of the onion sets. (Louise, Paul, Melva, Sam, Gary, Bill, Lucy and Naniloa) ~Naniloa

#### Presidio Garden

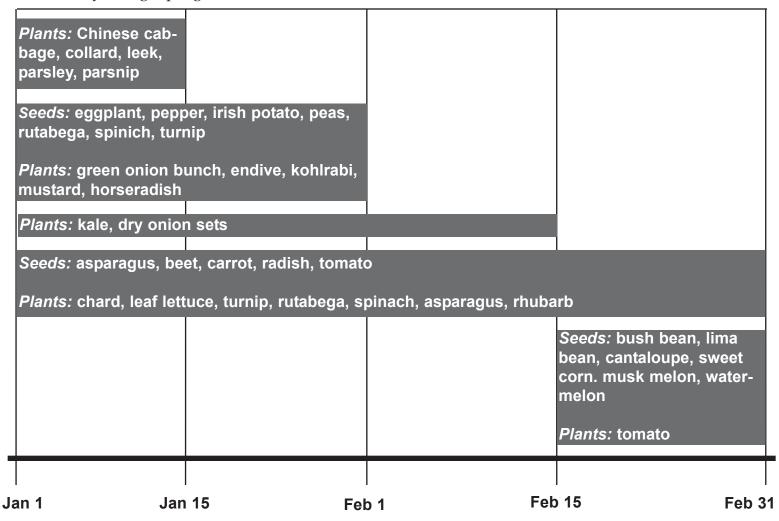
The Presidio Garden was fairly dusty recently. Jim Kelley, our Chaverim compost master, scored a shredder or hammer mill from his neighbor's contribution on big item trash day. It's called a Roto-Hoe and it's a well-built device. Sadly, it's not that big of a suprise to find out that it is no longer in production. This thing was built to last. After a little bit of tinkering with the fuel delivery system, this thing fired right up and was ready to be tested. Presidio is the perfect test bed for this beast since we have quite a stash of "in-place" compsting material. I conned Jim into coming along to help with the operation and Bob Ishmael even showed up. It took about 3 &1/2 hours and it spewed a good bit of plant dust at us, but it did the job exceptionally well. It knocked everything from walking stick size branches and old tomato vines into inch-long snippets in short order.

Stan and Sally Coulthard cleaned up the dead bermuda that's been loitering too close to the garden. During the noticeably silent breaks in running the Roto-Hoe, we were able to enjoy the good company of everyone in attendance. George was busy most of the morning planting spinach for the upcoming trials. Stan and Sally brought Clementines and Coffee while George found another of his yellow-rind watermelons that was thought to have been long gone. It was a good day. Thanks especially to Bob Ishmael and Jim Kelly for their invaluable assistance. They appeared to just have fun playing in the dirt.! I know that I did. ~Andy

## A Planter's Guide

#### to January and February

Cooler temperatures and seasonal rains make the next two months ideal for growing some of our favorite stand-by vegetables. This is the perfect time to enjoy lettuce and cabbage straight form the garden, and peas planted now will be ready through spring.



shaded bar marks those dates safe for planting



### Article of Interest

## Jeruasalem Artichokes

I first came upon Jerusalem artichokes one glorious fall day years ago on a family visit to Plimoth Plantation a museum village in Massachusetts re-creating daily life in Pilgrim times. While we were there the "residents" were preparing dinner. We clustered around a lamb roasting on a spit, its fat sizzling and dripping into a pan wedged into the embers below. One of the residents threw several strange-looking tubers into the hot fat, where they rolled and bubbled around. Suddenly, he reached over, forked some out, and thrust them at us to eat. That may have been the best bite full of chokes I've ever tasted. The contrast of the crisp skin with the moist, slightly sweet interior was a revelation.

It was fitting that we first tried chokes at Plimoth Plantation, because they're a Native American food introduced by the Indians to the settlers. This Indian staple, sunroot, grew wild throughout North and South America and was cultivated by Indians along the East Coast. Explorers took chokes back to Europe as a novelty, where they quickly became popular and widely grown. In some areas they were known as Canadian potatoes, while in France they were called Topinambours after a tribe visiting France at the time the chokes were introduced. Although no one is certain how the more common name "Jerusalem artichoke" came about, it's most likely a mispronunciation of the Italian word girasol, which means "turning to the sun" (a trait of sunflowers), combined with artichoke - for their flavor resembles that of the more familiar globe artichoke. In any case, Jerusalem artichokes never came from Jerusalem and are not related to the globe artichoke.

The plant is a 6-10 foot tall perennial sunflower with yellow blossoms that also make attractive flower arrangements. The thin stems grow in clusters and are a nutritious cattle fodder. (For this reason, during the 1930s the federal government tried to interest farmers in raising Jerusalem artichokes, but to no avail.) Their roots spread out in all directions, bearing knobby, edible tubers at their tips. They're virtually indestructible, easy to grow, and thrive under almost any conditions. Plant them in a secluded spot of their own in the garden - unchecked, they can become a pest, spreading with abandon and shading other garden crops.

When tubers of Jerusalem artichokes grow wild in heavy soil they are smaller and less firm than those grown in garden loam rich in potassium. With good soil, yields can reach 10 pounds of tubers per plant. Tubers can be

planted in either fall or spring: just cut into pieces and plan 6 inches deep and 18 inches apart. Major growth takes place after the flowers bloom, so wait to harvest chokes until stalks have died down, which is early to mid-October in Massachusetts. Some people consider the flavor of chokes sweeter when they've been tempered by frost, but our experience has been that an early harvest makes no difference to the flavor.

I harvest chokes with a spading fork, digging about 6 inches away from the base of the plants, prying up their entire root system, and them collecting any tubers left in the ground. Hunt as I may, I never find all the chokes from a plant. Even small pieces broken off start new plants the following year: once you have a planting of chokes, they're yours for life. Jerusalem artichokes store poorly, for their thin skins rapidly lose moisture. The best way to store them is to leave them in the ground and dig up as needed.

Jerusalem artichokes' flavor and texture change dramatically from the raw to the cooked stages, making them as versatile as two different vegetables. Raw chokes tasted crisp and crunchy, with a texture like water chestnuts. They're best served sliced for dips or in salads where their sweet, delicate flavor is not over whelmed. Cooked, the chokes' interior becomes moist, sweet, and starchy with a texture somewhat like cooked chestnuts and a nutty flavor reminiscent of globe artichokes.

Preparation for cooking is simple. All you need to do is wash them well. As they can be very knobby, a brush is helpful to get around the protrusions and into crevices. You can cook chokes either with or without their skins. Cooking the chokes in their skins helps hold the flesh intact and makes them easier to peel - the cooked skins slip right off like beet skins do-however the flesh will darken. To retain the natural creamy white color of chokes, I peel them first, drop them in acidulated water, and cook them in a Blanc, which is simply a flour and lemon mixture. It's no trouble to make, and the chokes look much more attractive.

This information adapted from The Victory Garden Cookbook by Marian Morash.

## Keeping a Garden Journal

George mentioned keeping a spinach diary in his article this month and that started the little wheels spinning. Since I began gardening at home in the back yard earlier this fall, I thought that I'd outsmart my limited capacity to remember things by starting a garden journal.

Outside with the notebook and pencil I went. A shady spot put me in a position to see the garden without sunning the exposed top of my head. In a flash I had five neat rectangles on the paper and had filled in what I had planted in them. As with most things that I do in a hurry, I neglected to note several details. I put the names down of what I had planted and where. Heck, I even went back and added another picture when I put in wildflowers and removed some of the early lettuce that got cooked by the heat or eaten by the cabbage loopers. It wasn't until I read George's article and heard him speak at a garden meeting that I realized the error of my ways. My garden journal, while complete with lists and diagrams of what was growing where, was utterly lacking in the details that make a journal useful in the first place.

Making the flaws of my hasty actions even more glaring was the recent article by California Master Gardener Nan Sterman in the Dec/Jan 2005 issue of

by Andy Stevens

Organic Gardening magazine. In this article she discusses several suggestions for progress monitoring and to document the history of your plot. She also mentions the use of a pencil when writing on index cards or spiral notebooks since pencils won't smudge quite as bad as ink when wet. As for keeping track of what's been planted and when, she recommends recording the name, seed or plant source, planting date, fruit date, insects that attacked, and comments. By drawing a diagram on the page of your journal, you will be able to keep track of where things were planted. On the back of this page or the facing page of your journal, you can staple pieces of the seed packet to keep the brand name of the seeds. Overall it was a good article with some good tips.

I think that my next rendition of the garden journal will be in a 3-ring binder using graph paper, primarily because it already has the squares that I need to make a tidy rectangle. On one page will be the diagram of the garden and the facing page will be used for notes, comments, and other stuff that I can't quite fit on the diagram page. Also, I think that a soil temperature probe is in my future. Several notable master gardeners that I know recommend using them and it'll be nice to see what the comparison of ambient, shade, and soil temperatures looks like. Good luck and good gardening to all.

#### **Administrative Notes**

Plot Fees Now Due

As indicated by the bright new signs posted at each garden, plot user fees are now due. Plot fees are \$72 per plot per semester (Jan 1- June 31). Please send your plot fees to the attention of Treasurer Pete Dicurti at:

6642 N. Longfellow Drive Tucson, AZ 85718 Spring Potluck

Planning ideas are floating around about the spring potluck. Word on the street is that April 8th or 9th might work for everyone. I think that by using this weekend, we can avoid most of the spring religious holidays. Be sure to let your garden coordinators know which date works best for you and where you'd like to have it. The location is still open, but Chaverim or Presidio locations have the nod since Paul and Melva at Corbett have hosted the last two.

Community Garden of Tucson Steering Committee Meetings Second Thursday of each month, 9:00 am 2940 North Santa Rosa

## Community Garden

## Activities









Clockwise from top left: Spinach packs ready to be planted for George's comparative trials. They made it into the ground and the experiment has begun. Unai Urreiztieta may be small, but he took our newsletter editor to task during the game of Go Fish at the recent Wilson Garden meeting. Darlene and Melissa kept a close eye on Dianne since she's as slick as a fish when it comes to card games. Jim Kelley and Bob Ishmael solved most of the worlds problems recently at the Presidio meeting. We're lucky, they left a few things for the rest of us. George led another informative garden walk session at the Chaverim Garden. Garden pests, production, preparation and last, but not least, patience, were discussed.

## Community Garden

## Calendar

### January 2006

Corbett Garden Meeting, 9:00am

2CGT Steering Committee Meeting at Darlene Schacht's, 2940 N. Santa Rosa, 9:00am. All CGT members invited.

Presidio Garden Meeting 9:00am



1 5 Chaverim Garden Meeting

Wilson Garden Meeting

#### February 2006

Corbett Garden Meeting, 9:00am

CGT Steering Committee Meeting at Darlene Schacht's, . All CGT members invited.

Presidio Garden Meeting, 9:00am



Deadline for Newsletter Submissions

Chaverim Garden Meeting 9:00am

Wilson Garden Meeting, 9:00am

5