

Harvesting Community Gardens in San Jose, CA

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Introduction

Most claims justifying the relationship between community resources, land use and improved access to food from community gardens lack grounding in empirical research.

Documenting both produce harvested and cost savings associated with community gardens provides data to support their increasing numbers and size.

Only a few studies have documented crop yields of community gardens in the US, all of them reporting highly variable results.

Method

- 1) Validated survey of 83 community gardeners from 4 different sites gathered April-September 2012. *Demographic data, cost savings, BMI, vegetable intake; self-rated health, benefits of gardening, distribution of excess produce*
- 2) Representative sub-set of 10 gardeners who weighed produce output from May-September 2012. *Portable electronic scales for use in the field; calibrated scale accurate to 5 grams with 4% deviation. Cost savings calculated using data from average retail price minus overhead.*

Results

- Majority of gardeners were over 50, had completed some college, and reported a wide range in income; on average BMI was normal and over half reported excellent to good health.
- Benefits included getting out for fresh air and exercise, meeting with friends, learning from other gardeners and stress release; excess food went primarily to friends and family.
- No strong relationship between plot size, number of plants and pounds of produce grown. Squash showed a positive correlation with garden space.
- Cost savings were \$1.60 /lb of harvested produce.

Table 1. Background data for survey participants

	Total N = 83	#Responses
Age, years	56 ± 12	83
Gender, Female		79
Housing	House = 53 (63%); apartment= 12 (14%); Other = 18 (21%)	83
BMI	25 ± 7.4	73
Overall Health Rating	Average 3.6 ± 1.0 Excellent N = 19 (24%) Very good N = 21 (27%) Good N = 28 (35%) Poor or very poor N = 11 (14)	79
Highest grade	< High school N = 13 (16%) High School graduate N = 10 (12%) < 4 yr college degree N = 36 (46%) 4 yr degree or greater = 20 (25%)	79
Monthly income	4,900 ± 3,600	56
Gardening experience	1-10 years Average: 4.6 ± 4 years	
Distance from garden	2.6 ± 3.0 miles range = 0.1 to 12 miles	
Amount spent last month on food	\$318 ± 223	75
Money Saved/ month by having garden	\$87 ± 70	71
Total Vegetable consumption / day	2 ± 0.7 cups	82
More vegetables/day from garden	2 ± 0.1	54

Aim

In Partnership with the City of San Jose Parks and Recreation Department:

- Develop reliable method for weighing produce in community gardens
- Test two hypotheses: 1) the average harvest from community gardens would exceed 0.6 lbs/sq ft*; 2) average cost savings would exceed \$2/lb per plot** based on average produce prices in season*

* USDA Vegetables Summary, 2010
** National Gardening Association, 2009

University of California
Agriculture and Natural Resources

Pounds per Square-foot Production of 4 Vegetables in Different Size Community Gardens- Santa Clara County-2012

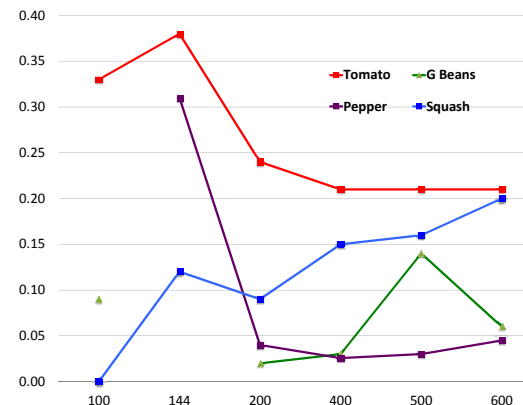


Fig. 1. MG volunteer with project participant



Fig. 2. A family affair: Weighing the harvest



Fig. 3. View of a community garden plots



Fig. 4. Gardner with multi-cropping system