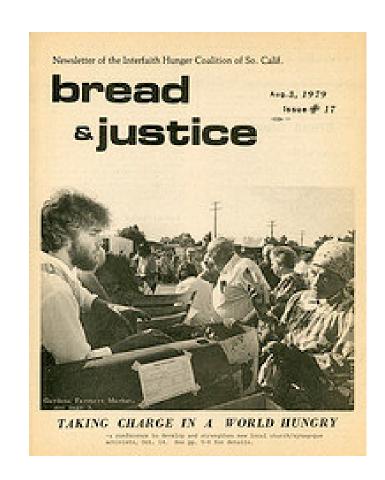


Urban Agriculture in East Palo Alto



Overview

- Wolfram Alderson
- Collective Roots
- East Palo Alto
 - Geology & Environment
 - Agricultural History
 - Social, Economic History
- Urban Agriculture
- Urban Agriculture in EPA
 - Past & Present



Wolfram Alderson

Urban Ag Experience Spanning Over 30 Years

- Childhood
 - Toxic Playground /Michigan Woods / UrbanParks
 - Neighborhood Gardener
- IHC / HOT
 - Certified Farmers' Markets
 - Urban Agriculture
- Horticulture Therapy
 - Cuban Refugees
 - Casa Colina Rehab Hosp

- LandLab / Cal Poly
 - Habitat Restoration
 - Commercial Scale
 Composting
 - Demonstration Gardens
- Xela Aid / Guatemala
 - Mayan Mam Midwives / Refugee Village
- School Gardens
 - Pomona Unified
 - Collective Roots

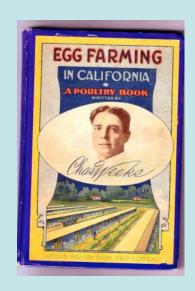
East Palo Alto

- Geology & Environment
- Agricultural History
- Social, Economic Background











Collective Roots

The mission of Collective Roots is to develop young urban leaders who understand where their food comes from and how their actions impact human and environmental health.

- Garden-Based Learning
- Food System Change
- Environmental Action

East Palo Alto Geology & Environment

Past

- Geological: Alluvial Fan has created some of the best soils in the region.
- Baylands were once the food basket of the Ohlone civilization
- Rich agricultural history in EPA has woven through various phases of occupation and dominance by myriad cultures that have dominated the landscape in and around EPA...people of all colors: Native Americans, Spaniards, Whites, Japanese, African Americans, Latinos, Pacific Islanders

East Palo Alto Agriculture

Urban Agriculture, like any social / environmental movement must be framed within the context of understanding the history of the community that is involved.



Weeks Poultry Colony, East Palo Alto

Runnymede Little Farms Colony by Charles Weeks in 1916

Also known as the Weeks
Poultry Colony, the
utopian agricultural
community's population
peaked at about 1,000 in
the mid-1920s but
dwindled considerably
during the 1930s.

Weeks bought and sold 600 1 acre lots in Runnymede. "To own a plot of land, to build a home with a fireside all your own, to plant trees, and flowers, and grow fresh vegetables, and pick berries, and feed hens, and gather eggs, this in the dream of men, whether rich or poor."

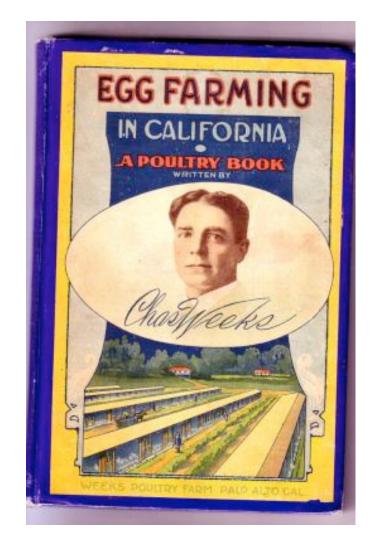
-Charles Weeks

The utopian community has had have long-term implications

Tension between

Runnymede colonists and Ravenswood residents led to a bifurcated community with separate chambers of commerce and confused boundaries.

One acre lots shaped the landscape of East Palo Alto and can still be seen today.



East Palo Alto Geology & Environment

Present

- Land: Toxic dumping and agricultural/industrial uses have poisoned my sites in the community. EPA Baylands are polluted and include at least 2 superfund clean up sites.
- Housing: Housing density and gentrification has pushed property values up over \$1.5 million per acre, placing low value on preservation of agriculture and open space assets.
- Open space: EPA residents currently have the lowest level of access to municipal open space in San Mateo County.
- Air: Traffic corridor and industrial pollution may be among factors contributing to EPA children having the highest level of hospitalizations from asthma.

East Palo Alto Suffers From The Presence of Toxics

- Over \$1M has been spent to investigate contamination on Brownfield and <u>other toxic</u> <u>sites</u> throughout East Palo Alto.
- Toxic dumping continues
- East Palo Alto has higher rates cancer, childhood asthma, and other illnesses than the rest of San Mateo County.
- The causes of these higher rates of illness are unknown, although higher levels of pollution in the community are suspected as having something to do with it.



Romic Factory (Closed, now an EPA clean up site)



Unlocked entrance to Baylands (Illegal Dumping is Un-Checked)

East Palo Alto Toxins

- EPA has been home to ROMIC Environmental Technologies Corp, the County's seventh highest toxic chemical emitter, and also experiences heavy flows of traffic on its major streets.
- According to the Environmental Protection Agency, East Palo Alto was at highest risk for lifetime cancer from 32 toxic air pollutants.
- Statistics show that in 1999, EPA's asthma hospitalization rate for children (ages 5-14) was the highest in San Mateo County and 2.5 times higher than the County's average rate.

East Palo Alto Air Quality

- Air quality has long been a concern for the city.
- EPA continues to have a high asthma rate-14.2% of residents surveyed have asthma, twice
 the rate of asthma sufferers in San Mateo
 County on a whole (6.7%). A frightening
 correlation between health and length
 of residency in EPA finds that 65% of asthma
 sufferers have lived in EPA for 15 years or more.
- Additionally, one in 32 residents surveyed suffers from cancer and 31% suffer from allergies.

East Palo Alto Geology & Environment

Future

- Global Warming Impacts?
- EPA Flood plain: levees are too low, flood risk comes from two directions (EPA is in the Franciscito Creek Flood Plain, one of the most troublesome on the peninsula, and is surrounded by the San Francisco Bay). The Army Corps of Engineers can not currently certify the levees because the "levees lack three feet of freeboard." Freeboard is the vertical distance of the levee between the peak storm event waterline and the top of the levee" There is no plan that addresses potential effects from global warming. Redwood City is leading efforts that frames school gardens within the context of strategies that address global warming.
- Urban Forest and Tree Canopy is diminishing in EPA. What are the environmental consequences?

East Palo Alto Baylands

Global warming and "100 year" events could provide significant risk of flooding

Baylands have been subject of dumping and industrial pollution





Levee and polluted creek behind East Palo Alto Charter School

East Palo Alto Urban Development

- Shifting Demographics
- Housing, Density, and Population Growth
- Suburban Crisis
- Race, Ethnicity and Politics
- Urban Sprawl and Public Health
- Livability Factor
- Dreams of a City & Mike Berman's Paper

Events That Have Shaped The Demographics of East Palo Alto

- Remained agrarian through the Depression
- Post WWII boom, Japanese
- Shift from farming community to working class
- Menlo Park annexed Belle Haven
- Racial segregation, "blockbusting"
- White exodus: population of East Palo Alto plummeted from 67.7% in 1960 to 31.2% in 1970 to 6.5% in 2000

1998 and 2001 Compared

Racial/ethnic demographics

- Black: 42% decreased to 23%
- Hispanic: 36% increased to 59%

Housing Prices

- Median Home Price: increased by 200%
- Median Rental rates: increased by 27 to 80%

City Growth

- Population increased by 26%
- Households: increased by 0.3%
- Housing units: declined by 3.5%

East Palo Alto's Suburban Crisis

"Can be attributed to the long-term effects of racial discrimination and economic marginalization."

A community study conducted in October 1983 connected many of the community's social and economic problems to continuing discrimination. The study concluded that the chief reasons "East Palo Alto housing prices are lower than surrounding areas . . .are high crime rates, poor schools, poor public facilities, and most importantly white prejudice against living in a minority community." (1)

East Palo Alto's Suburban Crisis

A study in 1999 found that people of color in East Palo Alto – especially African Americans – still suffered from discriminatory lending practices in the housing market in the San Francisco region.

For instance, depending on the type of loan, East Palo Altans were up to five times as likely to be denied a loan as their neighbors in Menlo Park's Willows area. (2)

Source:

- Race, Ethnicity and Inter-minority Suburban Politics: East Palo Alto, 1950-2002, by Mike Berman. http://www.stanford.edu/group/CBPA/EPADream.html
- 1. Final Report, East Palo Alto Displacement Study, prepared by Richard C. Carlson, Western Futures, Palo Alto, CA, 24 October 1983, 5. Haas Center Archive.
- 2. Memorandum from Carol Lamont, HUD Community Builder, to HUD Financial Incentive Program Committee, 9 February 1999; idem, "Disparate Lending Patterns," Home Mortgage Disclosure Act, HUD 1997. Haas Center Archive.

Race, Ethnicity and Inter-minority Suburban Politics: East Palo Alto, 1950-2002

"Future socioeconomic transition that may portend a transformation in the ethnic makeup of the community (insofar as socioeconomic class and ethnicity remained linked due to continued disparities in educational achievement, occupational mobility, discriminatory lending practices and other factors).

Thus the possibility exists that racial and ethnic divisions – no longer the primary determinants of political interests and identity in East Palo Alto's political discourse – could re-emerge as political dividers that mimic the racialized political divisions that existed in East Palo Alto in earlier decades."

-Mike Berman, Author and Teacher at East Palo Alto Charter School. Read the entire paper at http://www.collectiveroots.org/resources/berman

EPA Household Income Distribution

Income Group	% of Area Median Income (AMI)	Total	2000 Households
Very Low	Below 50%	35.4%	2,470
Low	50 to 80%	12.2%	851
Moderate	80 to 120%	28.0%	1,953
Upper	Above 120%	24.4%	1,702
Total		100%	6,976

Source: Income distribution from 1990 Census applied to 2000 census data on a number of households. (City of EPA)

Housing Density

(A tale of two cities)

East Palo Alto 2.5 Square Miles

- Houses: 7,059
 - (6,938 occupied: 3,002 owner occupied, 3,936 renter occupied)
- % of renters here: 57%, State: 43%
- Housing density: 2772 houses / condos per square mile

Palo Alto 25.6 Square Miles

- Houses: 26,155
 - (25,327 occupied: 14,398 owner occupied, 10,929 renter occupied)
- % of renters here: 43%, State: 43%
- Housing density: 1105 houses / condos per square mile

Housing Density and Household Size Increasing in EPA

Average Household Sizes according to U.S. Census 2000, East Palo Alto and San Francisco Bay Area

	Latino	White	Black	Asian
EPA Renters	5.82	1.96	2.99	2.84
EPA Households	7.02	2.32	3.21	3.48
Bay Area Average	3.90	2.31	2.69	3.16

Is East Palo Alto Becoming More Livable?



Urban Sprawl and Public Health

Dr. Richard Jackson, Professor of Environmental Health at the University of California, Berkeley and co-author of Urban Sprawl and Public Health has raised concerns regarding the damaging effects that the built environment has on health well-being of the community. He challenges us to seek ways to prevent and reduce diabetes, obesity, depression, heart disease and cancer.

A San Mateo County work group has been formed to prioritize and develop a plan to implement the strategies from the forum, including efforts to ensure healthy choices for school children and efforts to make the community more pedestrian friendly and the County has begun a review of its own zoning and building requirements for its livability, to encourage physical activity, nutritious food choices and community connectivity.

Dreams of a City

"Dreams of a City: The East Palo Alto Project"
SUPERB documentary originated by the
Committee on Black Performing Arts at Stanford
University, in collaboration with the citizens of
East Palo Alto, in 1991.

Remarkable social documentary focuses on community's goal of presenting its history from the perspective of its residents.

Source: http://www.stanford.edu/group/CBPA/EPADream.html

Urban Agriculture THEORY: WHY?

The discussion of Urban Agricultural brings up topics that include:

- Environmental, economic, and social dimensions of urban food production
- Public policy and land-use planning
- Role of urban agriculture in public and environmental health
- Role of urban agriculture and the provision of environmental and recreational services

What is the role and impact of urban agriculture, (school gardens, farmers' markets, etc.) in addressing food security and income generation in lowincome areas?

Compelling Thoughts Supporting Urban Agriculture

"Our interconnectedness on the planet is the dominating truth of the 21st century. One stark result is that the world's poor live, and especially die, with the awareness that the United States is doing little to mobilise the weapons of mass salvation that could offer them survival, dignity and eventually the escape from poverty." Sachs (2002)

Is Urban Agriculture an effective tool / strategy for alleviating the affects of poverty and addressing food security?

...a tool for building "interconnectedness"?



Or, Is Urban
Agriculture merely a
quaint vestige of
history, destined for
demise or to remain
on the fringe of urban
civilization as a
recreational option?

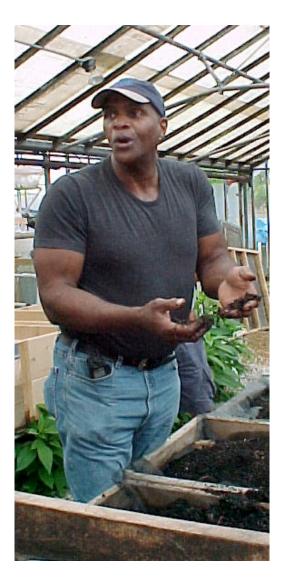


Urban agriculture makes it possible for us to change from our suits into jeans, to dig up a bit of lawn or asphalt, plant vegetable seeds or fruit trees, and then begin to ask the questions about our food system, environment, and about our urban behavior and thinking patterns.



EPA Youth, Collective Roots

Will Allen, Growing Power



Viability of Urban Agriculture?

My thesis:

In order for Urban agriculture to become, remain viable, a powerful multi-disciplinary matrix of community specific, culturally relevant, rationales, strategies, and technologies must be developed, refined, and integrated.

CAN provide building blocks for community development and food security, but NOT if they are marginalized as quaint expressions of neighborhood gardening.

Urban agriculture must be connected to mainstream movements involving health, education, environment, economy, etc., if it is to hold relevance.

Urban Agriculture in EPA

- Trevor Burrowes & the EPA Historical & Agricultural Society / Weeks Neighborhood Plan
- David Winsberg -Agriculture
- Cornelia Fletcher Landscape Contractor
- Collard Greens Festival

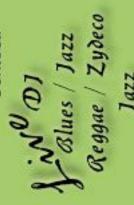
Collective Roots

- School Gardens, Youth
 Farm Stands
- Farmers Market
- EPA Tree Initiative
- Backyard Gardener
 Network / Social
 Documentation
- Community Garden
- Land Trust

2007







Collard Greens

Celebrating Culture, History and Traditional African American Food

Sat. July 28th, 2007 12:00 Noon - 7 PM

Bell Street Park East Palo Alto

- BEBE` Land Children 12 & Under
- · Collard Green Ice Cream

www.epa.net/collardgreens



For Booths & Further Info

650.323.5861



Trevor Burroughs

Founded the EPA Historical and Agricultural Society (now dissolved)

Led the development of the Weeks Neighborhood Plan in 1997

The Weeks Neighborhood Plan emphasized economic, social, and educational activities focused on agriculture and open space.

The plan envisioned enhancing these assets to transform the Weeks Neighborhood into a friendly mixed-use residential / farming community.

The Weeks Neighborhood Plan was based on a positive vision of the Weeks Neighborhood as a thriving place to live and work. It included farming and horticulture as key economic assets of East Palo Alto.

Happy Quail Farms

- David Winsberg, Owner of Happy Quail Farms, has been producing specialty peppers in East Palo Alto since 1980. David grows and sells a large variety unusual peppers as well as Mediterranean cucumbers, rhubarb and horseradish in major Farmers' Markets in the Bay Area, and to restaurants and caterers throughout the country. During peak season his operation brings in over \$30,000 per month in sales.
- David also has a beautiful garden surrounding his home and greenhouses, and grows chickens.
- David has built a high quality commercial greenhouse operation, and is one the of the last commercial farmers left in East Palo Alto.







Cornelia Fletcher

Cornelia is a resident of East Palo Alto and a Licensed Landscape Contractor. Cornelia lives on one of the last remaining 1 acre lots that are a vestige of Runnymede Farms. She hosts a nursery on site, maintains a large vegetable and fruit garden, and has built a barn for community use. Her knowledge of local agricultural and horticultural conditions is superb and she is an advocate for food system change and school gardening.



Cornelia's vegetable garden and barn on Green Street, East Palo Alto.

Collective Roots Urban Agriculture Model

- Organic School Gardens
- Environmental Justice, Community Partnerships
- Farmers' Market
- School Food Revolution
- Backyard Gardeners' Network
- Community Garden
- Biointensive Systems-Recycling Green waste

Schools as Ecosystems Integrated with Education, Health, & Environment

"The ecological principle of interdependence (Kelly et al., 2000), in which changes in one component of an ecosystem will produce changes in other components, further suggests that (a) changes in the school may set in motion processes of change in the family and community environments, and vice versa and (b) changes in one domain of student functioning (e.g., nutrition, bonding to school, and peer relationships) may influence other domains of functioning."

School Gardening: A Systemic Intervention

Collective Roots adopts ecological theory to conceptualize school gardens as systemic interventions that promote the health and well-being of students, teachers, and families in multiple interdependent domains and for strengthening the school environment as a setting for positive youth and community development.

Cultivating Connections

Cultivating a connection between our food and the earth through organic gardening is an important approach to understanding what goes into our food, and how we can improve human as well as environmental health.

Why Organic?

Organic gardens provide ideal settings for:

- bringing school wellness policies to life
- providing dynamic opportunities for wellness education
- engaging students and families in health activities in ways that foster healthy new habits that also happen to be fun and integrated into the fabric of community life

Environmental Justice and Community Health

- Collective Roots gardens and programs provide opportunities to explore social and environmental justice issues that impact the health of the community.
- We accomplish this through hands on or "project based learning."
- Student and participants in Collective Roots programs are provided with galvanizing experiences that foster individuals who become better prepared to advocate on health issues related to the food system and the environment.

Partnerships in Education, Health, and Environment

Seeing these interrelationships is facilitated through engaging students with a wide variety of organizations and institutions that are partners in health promotion and learning that is grounded in the community and the environment.

Collective Roots is currently collaborating with dozens of community based organizations in a variety of fields:

- Education
- Health
- Environment
- Law
- Business
- Communications

EPACS Garden History & Development

- Evolution
- Relevance in East Palo Alto – Open space asset
- Edge of the Baylands
- Ravenswood City School District
- Partnership with EPACS
- Toxic Waste Spill

- Sponsors, Funders, Donors, Advisors, Partners
- Bon Apetit
- NVIDIA
- Vance Brown Builders







Site Design

- Design Principles and Precepts
- Organic
- Center, Flow
- Borders / Windrows
- Modified Raised Bed System
- Extensive Mulching / Sheet composting
- Trees
- Places to BE
- Nature is welcome

- Who is it for?
 - Students
 - Teachers
 - Community

Connections

- Farmers' Market
- School Health & Wellness Plan
- Science Education
- Habitat Restoration
- Recreational Open Space
- Trees
- Open Space, Land Trust
- More School Gardens
- Base / Leap Frog Site to nearby habitats

Key Elements of the Garden

Design Elements

- Outdoor Kitchen
- Orchard
- Compost
- Vermiculture
- Earth Boxes
- Mural
- Pond
- Perennial Border –Windrow
- Agriculture
- Green Dome (Greendom)

Infrastructure

- Water, Power, Solar Power, Irrigation
- Storage
- Mulch / Sheet Composting System
- Bed System

Production Principles & Practices

- Irrigation Design
- Greenhouse, Nursery
- Organic, Permaculture
- Recycling Arboriculture Industry Waste
- Modified Raised Bed System
- Windrows: Borders, Trees

Tools, Equipment, Resources

- Hand tools
- Bent Pitchfork
- Digging / Eye Hoes
- Mulch
- Website, great for cultivation!
 - CRM, CMS, MashUps, etc.

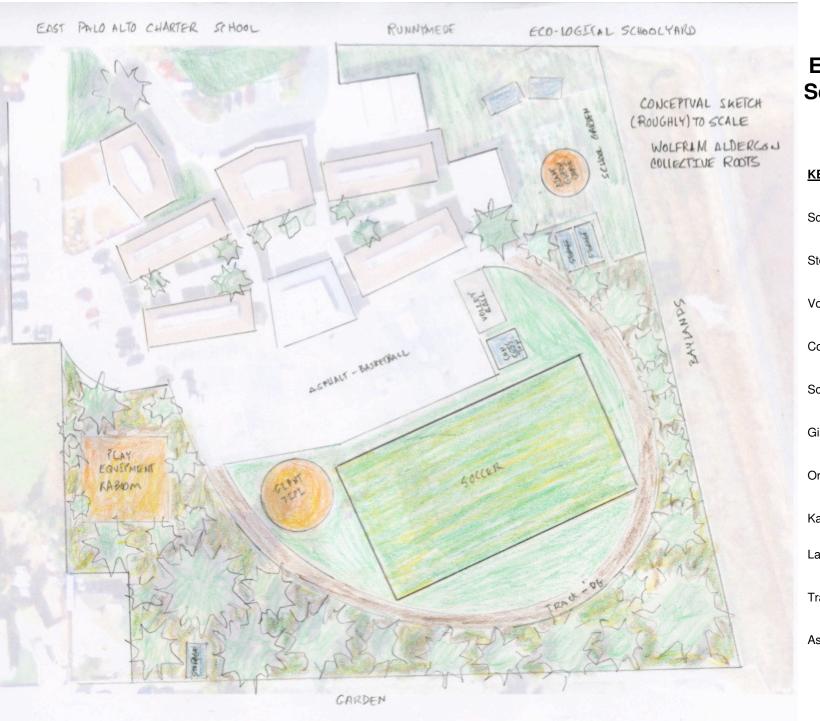
- Secure Storage
- Safety
- Security, Vandalism

The Future

- Environmental Summer Camp
- Habitat Restoration
- Schoolyard Transformation
- Collaborative Events and Activities

- Distribution, Sales
- Certified Farmers' Markets
- CSA / Cut flowers / Herbs / develop niche markets
- Mobile Farm Stand / Food System Change Roadshow
- Community Building





Ecological Schoolyard Design

KEY

School Garden

Storage Containers

Volley Ball

Concession Stand

Soccer Field / Turf

Giant Living Tipi

Orchard / forest

KaBoom Play Area

Lawn

Track-DG

Asphalt Play Area





HE⁽³⁾D: Urban Agriculture

- +**H**ealth
- +Environment
- +Education
- +**E**conomy
- =**D**evelopment

Factors essential to developing a sustainable model of Urban Agriculture.

Each of these domains provides rationales, funding, and frameworks that can strengthen the Urban Agriculture Model.

Urban Agriculture: Needs & Future

- Urban Agriculture Institute
- Urban Agriculture Land Trust
- Funding strategies must be developed that will address capitalization as well as maintenance of urban agriculture sites.
- Land values are so high that it is extremely challenging for individuals and small organizations to bear this weight on their own—the costs must be socialized and the model must be developed to support it.

- The municipal park system is caving in due to deferred maintenance.
- Urban Agriculture "Parks"
 might actually be able to
 address this because of
 intense involvement of
 volunteers and revenue
 generated from produce sales.
- Mixed use development should also be considered: housing, restaurant, farmers' market, etc.