The Gardening Research Initiative (GRI) Of *Project Grow Community Gardens*

A Capstone Project With The Michigan Conservation Stewards Program (MCSP)
Michigan State University Extension,
Presented: 22Apr2013 – Ver08May2013

Proponent: Gardening Research Initiative Committee, Chair: Joet Reoma

Website: http://projectgrowgardens.org/   **Contact**: joet@projectgrowgardens.org, joet@umich.edu 734-972-8875

1. **Project Background and Description.**   Since its founding in 1972, Project Grow Community Gardens is committed to one mission – to provide the space, education and inspiration to make organic gardening accessible to all. It currently manages some twenty community gardens within the city of Ann Arbor. Project Grow also owns the *Organic Gardening Certificate* course offered by the Washtenaw Community College. To continue its education commitment, we propose a special project called the *Gardening Research Initiative (GRI)* with the following goals,
    a. *To encourage and support exploratory research and* development of *innovative and ecology-based gardening approaches, solutions and techniques for adoption in small-space urban setting,*
    b. *To highlight opportunities to study and implement the connections between two typically distinct enterprises: ecological conservation and community gardening,*
    c. *To* provide a secure *gardening site to conduct the study and a venue to publicize findings through a public workshop and newsletter.*

2. **Program Site**. The primary site for this Initiative is the Airport Community Garden situated inside the perimeter fence of the Ann Arbor City Airport. The airport site provides the needed privacy and security for gardening research. It holds 36 full-size (25' x 30' or 750 sq. ft.) garden plots. The Airport garden site was closed in 2011 and 2012 because of prolonged flooding and being overrun by comfrey plants. Under this research initiative which will apply ecological and permaculture design principles, these two challenges are not considered problems but instead they are resources or solutions to the most vital needs of gardening – the need for water and the need for compost. The Airport site is now open for enrollment for both research gardeners and non-research gardeners.

3. **Program Operation**.
    a. **Funding.** Project grow will provide or raise the initial $1,500.00 as the break-even cost to open the site. This includes the cost for opening the water hydrant, a stipend for a site coordinator, mowing services and shared water usage. Each full size plot costs $25 for garden researchers and $60 for non-researchers. These fees are non-refundable. A fee for water will be based on actual group usage (about $20). The research site will officially open in mid-May 2013. Next year, the plot fees will revert back to the usual rates ($130). With success, grant or donor financing will be sought for continuity.

    b. **Target Participants**. This GRI program is offered to individual gardeners or groups willing to do a research-oriented gardening with this specific goal in mind - *to pursue innovative and ecology-based gardening approaches, solutions and techniques.* Suggested research topics are listed below. Likely participants include all gardeners or groups, such as urban farmers, permaculturists and conservationists, children-parents teams, student-teachers teams, high school-college teams, gardening clubs, and youth-seniors teams. The program encourages teamwork where members mentor, nurture and back up each other.

    c. **Resources, Services and Site Policy**. In addition to providing the gardening site, Project Grow will provide participants with education and mentorship assistance in organic gardening, composting, garden maintenance, plant health, disposition of garden harvest, and gardening angels when volunteers are available. Site Policy: no permanent and hazardous structures, no commercial fertilizers and herbicides, and no automatic water timers tapping directly on main water lines.

    d. **Project Plan, Monitoring and Publishing**. Participants must meet three minimum requirements: (1) a written page of the project plan that include project description, plan of action/monitoring, and expected outcomes; (2) attendance in a monthly potluck meeting to share gardening progress; and (3) presentation and sharing of results in a year-end conference called the *Gardening Research Workshop,* and publication in Project Grow's Newsletters and other community news channels.

4. **List of Suggested and Sample Topics for Exploratory Gardening Research**

   1) Compost Gardening (integration of gardening and composting on the same bed)
   2) Vermiculture Gardening (integrating vermicomposting and gardening on same bed)
   3) Fungi Gardening (integrating mushroom culture on open garden beds)
   4) Hugelkultur Gardening (mimic how forests garden with fallen/nursery log as mound compost gardening).
   5) Sheet-Mulch Gardening (mimic how forests floors garden and grow food systems; explore lasagna gardening)
   6) Deep Organic Gardening (explore what it is and its best height for different plants)
   7) High Density Gardening (explore Square Foot Gardening)
   8) Vertical Gardening (explore forms of vertical gardening of veggies on various small spaces)
   9) Multi-Layer Gardening (gardening varieties of veggies on staired layers of vegetation)
   10) Year-Round Gardening (explore cold frames and on-plot green houses for fall/winter gardening)
   11) Drip Irrigation Techniques (explore drip irrigation, water re-circulation for gardens)
   12) Aquaponics Gardening (explore adaptations of aquaponics on a raised bed that can last throughout winter)
   13) Rain Gardens and Swale Gardens (explore adaptations of rain gardens and swales)
   14) Companion Planting (explore non-traditional companions, or alternative plants for 3-sisters gardening)
   15) Habitat Gardening (gardening with mini-habitats for small creatures – pollinators, birds, frogs, etc.)
   16) Comfrey Gardening for Compost (explore the chemistry and the benefits of comfrey plants)
   17) Dandelion Gardening (explore benefits of dandelions and the dandelion-earthworm partnership)
   18) Biological Pest Management (explore uses of marigolds versus alliums as pest deterrents)
   19) Native Wildflower Gardening (explore and grow native wildflower for conservation)
   20) Native Grass and Tree Gardening (explore growing native grass for conservation using garden as nursery)
   21) Pollinators (explore role of beekeeping in conservation and teach beehive care and maintenance)
   22) Herb Gardening (explore gardening herbs for health benefits)
   23) Discovery Gardening (explore the best elements of a discovery garden by target groups)
   24) School or Curriculum-based Gardening (explore best veggies combinations for school gardens)
   25) Team Gardening (explore social and mentoring benefits of team-building in group gardening)

5. **General Guidelines**
   a. To come up with a written research proposal, *observe & connect* your topic to the garden plot size (small-space gardening limitation) and site gardening policy (no permanent and hazardous structures).
   b. To develop an exploratory, goal-oriented, ecology-based gardening research, become familiar with ecology principles in permaculture design, ecosystem-based resource conservation management, and organic gardening practice.
   c. Form a team to make the gardening project a learning experience. Example of team partnerships: parents and children, husband and wife, students and their teacher, between high school students and mentors such as college students or teachers, and between seniors (Wise Roots) and youth (Young Sprouts).
   d. Track, monitor, take pictures and keep a log or diary of your research project.
   e. Set up interpretive signs to highlight garden components or project stages.
   f. Join monthly potluck meetings and gardening workdays.
   g. Join the GRI online discussion and post questions and answers.
   h. Present and publish your research findings at the year-end workshop and in the newsletter.
   i. If this Gardening Research Initiative is successful, we will continue the project with full funding.

6. **Contact Information:** For inquiries and to schedule a visit to the Airport garden site, contact:
   a. Joet Reoma, Coordinator, CEC & GRI; email: joet@projectgrowgardens.org, joet@umich.edu
   b. Eric Meves, Coordinator, New Site Development Committee; email: ericmeves@gmail.com

7. **Reserve A Garden Plot:**   To reserve a plot, register online at: http://projectgrowgardens.org/application In the application, select Airport as first and second garden choice; in the additional gardeners box, type in 'Reserve for Garden Research group:' followed by the name of your group, and full names and email contact of group members. For payment, select '…mail check'. Make check payable to *Project Grow Community Gardens*. In the check's Memo, write 'For Garden Research Initiative'. Send payment to *Project Grow, P.O. Box 130293, Ann Arbor, MI 48113*. Send email to joet@projectgrowgardens.org.