



The Garden Ecology Project

Growing Healthy Food, Environments, and Communities in NYC

January 2011

Dear NYC Gardener,

I hope that the New Year finds you eagerly awaiting the gardening season! My name is Megan Gregory, and I am a student in Horticulture at Cornell University. In January of 2010, I began working with the NYC gardening community on "The Garden Ecology Project". Our project goals are:

- **To develop environmentally-friendly vegetable gardening practices, with and for NYC gardeners; and**
- **To enhance educational programs in gardening, nutrition, and community organizing.**

You are receiving this letter because your participation helped make the first year of the project a success! I'd like to update you on what we accomplished together in 2010, and ask for your continued collaboration in the coming year.

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2010 Accomplishments:

1) As a result of what we learned from **gardener interviews**, we expanded our research to target key insect pests in NYC gardens. In the past year I've spoken with about 80 gardeners, and while gardeners shared many challenges to growing food, **insect pests and soil fertility** stood out as priorities.

2) Our **garden mapping** activities will allow us to identify garden plantings that attract beneficial insects (insects that eat pests) and reduce crop damage. In 2010 we measured areas in various plantings (for example, vegetables, fruit trees, flowers, and ornamental trees and shrubs) in about 20 gardens.



Right: Some gardens have borders of perennial flowers around the vegetable beds. We will determine if these plantings can attract beneficial insects!



3) Our **insect monitoring** showed that **whiteflies** on collards and **spider mites** on tomatoes harm crop yield in most gardens. We also found **flea beetles, aphids, and squash bugs** in some gardens. In 2011, we will continue to monitor insects, and learn how gardeners can manage them in environmentally friendly ways.

Left: Whiteflies are a common problem in NYC gardens. We will learn how gardeners can manage them without pesticides.

4) **Soil fertility tests** showed that urban garden soils are very different from farm soils. In 2011 we will test gardening techniques, such as cover crops (see enclosed factsheet), that can help maintain fertile urban garden soils.



5) **Preliminary cover crop trials** are in progress! In Fall 2010, we gave workshops in several gardens on planting a winter cover crop. Gardeners are now testing cover crop combinations (see photo at right). We hope to get enough reports back to learn which cover crops and practices might be good matches for urban gardens. We'll keep you updated!

Above: A garden bed with oat/pea, rye/vetch, and red clover cover crops in fall.

*****Please see the back of this page to learn about our plans for 2011 and how you can help!*****

What's Next?

We have a lot planned for 2011 to support NYC gardeners. Your continued collaboration will be essential!

1) **More gardener interviews:** We need more gardeners willing to talk about their gardening practices, crops grown, and challenges they face in growing food. **To nominate a gardener, please contact us by email or phone (see below), or provide our contact information to interested gardeners to set up an interview at their convenience.**

2) **Formal cover crop trials:** A limited number of garden groups will have the opportunity to participate in our systematic assessment of cover crops in 2011! We will provide seeds and workshops in exchange for gardeners' collaboration in designing and managing the experiments. We will evaluate how well different cover crops and practices improve soil fertility, attract beneficial insects, and shade out weeds. Participating gardeners will receive information on the best cover crops for their garden sites.

Cover crops are planted in the fall after harvest and turned into the soil before planting vegetables in spring. Cover crops can increase crop yield by enriching the soil, shading out weeds, and attracting beneficial insects. See the enclosed factsheet for more information. Some cover crops are:



Oats



Field peas



Red clover

3) **Monitoring of pest and beneficial insects:** We will continue to monitor insects during the 2011 growing season with scouting and yellow sticky traps (see photo at left). To identify plantings that bring more beneficial insects, fewer pests, and less crop damage in gardens, we will combine this information on insect populations with garden mapping data.



Left: We can use yellow sticky cards to trap and monitor pest and beneficial insects in NYC gardens.

4) **Measuring food production:** There is currently interest in learning how much food is being produced in NYC. This information would help determine which gardening practices give the best harvests, and also aid in communicating the importance of gardens to policymakers. We are looking for dedicated gardeners who would like to know how much food is coming out of their gardens, and are willing to weigh and record ALL of their harvests in the 2011 growing season.



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Please visit our website at <http://blogs.cornell.edu/gep/> for more information on The Garden Ecology Project, and to contribute questions on urban gardening that you would like to see researched on the "Discussion Board."

Thank you for sharing your gardening wisdom, time, and effort with us during the Garden Ecology Project's first year. We look forward to continued collaboration in 2011 as we learn together how gardeners can produce abundant harvests and be good stewards of the environment.

If you have questions about the Garden Ecology Project or would like to get involved with any of the activities listed above, please contact Megan Gregory at mmg98@cornell.edu or 847-287-7794.

Sincerely,

Megan M. Gregory and the "Garden Ecology Project" team