What is the DSGC?

A collaborative network of 79 school gardens throughout the Detroit Public Schools System, EAA (Education Achievement Authority), and DPS authorized charter schools.

Supported by the 2010 Healthy and Hunger-Free Kids Act, which allowed the Office of School Nutrition to set aside USDA money from the reimbursed meal program to establish and maintain farm to school operations.

The mission of the Detroit School Garden Collaborative (DSGC) is to improve the access of Detroiters to healthy foods.

Established in 2011, the DSGC is entering its 5th year of supporting school farms and gardens!
School Gardens
Benefits of School Based Gardens

There are substantial benefits to school-based gardens:

• Fresh produce grown on-site
• Incorporating the harvest into the school meal program
• Children gain a greater understanding of the importance of fresh fruits and vegetables
• Children become ambassadors of healthy foods and can share this information with families
School Gardens

A vital component of the DSGC are the school gardens active at 79 schools around Detroit!

Hired seasonal Garden Attendants (GA’s) tend to the gardens throughout the summer months when classes are few or not in session.

These Garden Attendants bridge the gaps between the garden and classroom participation with teachers.

In many ways “GA’s” are local food ambassadors teaching staff and students the vital skills needed to grow and enjoy their own healthy, fresh foods.

Food grown at the school gardens is used for hands on activities at schools as well as is distributed to the school community where it was grown.
School Gardens

Each School Garden in the DSGC has at least six raised beds measuring 4’x8’.

The raised beds are two feet deep and lined with plastic sheeting to avoid potential lead and heavy metal contamination often founds in urban soils.

All raised beds are filled with compost/topsoil mix and are topped off with compost when needed.

All school gardens received seasonally selected seeds and transplants grown at our Randolph greenhouse facility.

All school gardens are raised with organic growing principles and are spray free (except compost teas or safe home remedies like diluted milk or baking soda).
Teacher Training Series with MSUE

The DSGC also supports a multi-stage teacher training series held throughout the year.

This Professional Development is held in conjunction with MSU Extension and the Office of Science at DPS.

This series is to help develop teacher’s gardening skills, which will translate to the students learning in the gardens.

Hands on activities and lessons meeting STEM standards are also taught to be used with students from a range of subjects including: vermicomposting, photosynthesis, and plant families.
Junior Master Gardener Program

The DSGC has partnered with 4H and MSU Extension to provide an eight-part Junior Master Gardener (JMG) course to students at schools serviced by the program.

Students from kindergarten through high school can participate in the certification program.

More than 150 Detroit students have received JMG certificates from participation in the DSGC since 2014!
The DSGC has partnered with Food Corps to receive two service members for the 2015-2016 year.

Food Corps service members facilitate and teach Junior Master Gardener lessons as well as nutrition education or gardening curriculum.
Buy Local Resource Center

The Buy Local Resource Center was implemented with grant funds from the DPS Foundation.

The purpose of the resource center is to support the buying of local Michigan produce.

Teachers can check out items from the resource center to use in class activities.

Items available to borrow include: books, blenders, dehydrators, juicers, spiral slicers, etc.
Drew Farms at Drew Transition Center

4 Acre Footprint (1/2 acre under hoop house +2.63 acres field production)

Key Crops Grown: Natural non-GMO sweet corn, butternut squash, “Stoplight Salad” [yellow squash, zucchini, cherry tomatoes], salad greens [brassica mix, spinach, and lettuce mix], potatoes, watermelon, collards, kale, and mixed heirloom vegetables.

In 2015 introduced the “DPS Salad Mix” consisting of spinach and lettuce.

Over 30,000 pounds of food grown at Drew in 2015!

Of that... over 11,000 pounds of food put into the OSN child nutrition meals!

Also... over 7,000 pounds of food donated or given to food banks!

All natural growing practices used with only OMRI Organic approved sprays and crop treatments, however, the DSGC is not Organic Certified at this time.
Challenges Unique to Urban Farming Setups

Soil Contamination Issues (Lead, Cadmium, Arsenic, Mercury)

Underground Debris and Hazards

Rodents and Vermin (Rats, Mice, Raccoons, Opossums)

Theft and Vandalism

Community Buy In

Appropriate Siting of fields, compost piles, etc.

Transporting Equipment

Facility Access
Challenges of Institutional Growing

The main difficulty is adjusting a traditional farming timeline to fit within an institutional schedule as summer (peak growing season) is when the fewest students (our customers) are available.

Increasing familiarity; getting students used to eating the items we grow.

Operations subject to interference from school bureaucracy.

Facility access issues.

Staff support from other departments or schools.

Processing to usable forms of product (most DPS cafeterias feature heat and serve kitchen; staff would be required to do a lot more to be able to readily use raw, farm-fresh items).
Timing

In order to execute successful and meaningful farm to school operations, we must change a traditional farming timeline.

Crops must go in earlier or later to avoid coming into maturity during July and August when most students are on break.

High tunnels and season extension become great tools in manipulating early and late plantings to be more successful than outdoor plantings.

Crop varieties also become important when discussing crop timing. For instance, a longer day watermelon “Harvest Moon” JSS-85 days- could be planted on the same day as a quicker variety “Starlight” JSS-75 days- and yet the harvest window is as many as 10 days later.

Those 10 extra days can be the difference between feeding kids in September or donating the product in late August!

While donating or selling produce is a part of our goals, growing for the cafeteria service is the main imperative!
Mechanization to Improve Efficiency

Drew farms is supported by a full line of tractor based equipment owned by the program:

Large Kubota M7040 for field production

Small Kubota BX2350 for utility work and in high tunnels

Small/Mid size New Holland for high tunnel production

We have tractor tillers, disc plows, moldboard plows, spreaders, sprayers, plastic layers, mechanical planters, seeders (till and no till), and potato equipment.

Our equipment list is so vast, we are considering offering tractor/plow services to other urban agriculture groups as another means of community support and revenue.
But what about our fields, gardens, and greenhouses?

Health and food safety is important every step of the way, from farm to table.
Accountability

This includes recording what seeds you used and where you got them, when and where your product was harvested, and where it’s going to end up.

Be accountable for traceability.
The Drew Farmstand

In 2015, Drew Farms expanded to include farm stand sales to staff at Drew Transition Center as well as at a school garden site Fisher Magnet Lower Elementary School.

Partnered with Eastern Market Corporation to provide a community food market at Fisher Magnet Lower Elementary (where the surrounding community is considered underserved in terms of food access).

Provided fresh harvested produce for sale below typical market value to staff, students, and community members.

Looking to expand to be able to accept Bridge Card (used for individuals eligible for food assistance in Michigan) in future seasons.
Mackenzie Field

Ground broke at Mackenzie Field (7 acre field formerly used as softball fields since at least the 1960s). Mackenzie is across the street from the Drew campus, so it was a logical expansion.

Soil testing in Winter 2014-2015 indicated that the soil at Mackenzie Field was pristine both in terms of nutrients as well as contamination.

One acre of ground was extensively worked and converted, but delays at Drew, unfulfilled “MISS DIG” (Michigan’s utility safety notification system) requests, two broken water mains, and wet soil from an overly moist Spring pushed planting at Mackenzie until August for a Fall harvest.

Collards, kale, and broccoli were successful despite issues with vandalism.

A late planting of beans did not make it in time for a harvest.

Plans for 2016 at Mackenzie are not yet decided, but the entire worked acre is cover cropped into Winter Rye.
In-House Processing

Through a grant from Lifetime Fitness Foundation, we have established a small scale process facility at Douglass Academy for Young Men.

The facility allows us to clean and package produce grown at Drew Farms.

The produce is distributed to schools for use in the school meals program.

To date, we have processed over 2000 pounds of salad greens.
Build Support using the 3 P’s
Public, Private and
Philanthropic Partners

United States Department of Agriculture
Local Food Association
Michigan State University
Life Time Foundation
Food Corps
Detroit Public Schools Foundation
Eastern Market
The Greening of Detroit
Wayne State University
Gleaners Community Food Bank
Russell Street Deli
United Way for Southeastern Michigan
National Farm to School Network
DSGC Garden Collaborative
Michigan Department of Education
Detroit Food & Fitness Collaborative
Michigan Kellogg Foundation Food & Community Partners

Power of Unity
Abundance
Excellence
Program Growth Timeline (2014)

School Gardens increase to 76 Schools

Drew Farms expands from ½ acre to a full 4 acre farm

Original Drew High Tunnel is damaged by wind, but repaired and re-sited on higher ground

Farm production over 20,000 pounds for the year

Ludington Permaculture Project erected

Catherine Ferguson Academy Farm reclaimed by the Office of School Nutrition and the DSGC

The OSN and DSGC makes national appearance at the US Farm to School Conference at Austin Texas
Program Growth Timeline (2015)

Drew Farms adds six high tunnels increasing indoor growing to ½ acre while reducing outdoor space to 2.63 acres

Farm production at over 30,000 pounds for the year -- a 50% increase over 2014

Mackenzie Field opened up to ½ acre of growing space with up to seven acres of clean soil available for future possible expansion

Catherine Ferguson Academy farm renovations continue with new barn roof and pruning of the orchards.

Ludington Permaculture Project re-scaled for increased community engagement.

School Gardens increase to 79!
Questions?