

Guide to Gleaning

A Surplus and Seconds Management Best Practice

Presented by:

The Gleaning Initiative

A Project of Healthy Acadia and UMaine Cooperative Extension

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INDEX

Introduction.....2

On–Farm Gleaning.....6

At-Market Gleaning.....7

Garden-plot Surplus Management Best Practice.....9

Seconds Gleaning.....10

Distribution Gleaning.....11

Conclusion.....12





Introduction

This *Guide to Gleaning* has the main goal to present the initial findings of ongoing research around the opportunities that gleaning can create for farmers as a seconds and surplus management best practice. Since the launch of The Gleaning Initiative in 2013, Healthy Acadia and UMaine Cooperative Extension, have worked closely with the Hancock County Food Security Network to design a plan to recover food from over thirty small-scale farms in Hancock County. For the past two years the framework for the gleaning activities have been perfected to best meet food security needs for farmers and food insecure populations. Maine ranks #1 in New England for food insecurity, with 13% of individuals counted as food insecure.

Under the USDA SARE the focus set out to answer the question of how gleaning activities can lead to surplus and seconds management services through a shared resource system and distribution network; including labor, transportation and marketing services. This *Guide to Gleaning* also draws from three reports that CYON Business Solutions developed after working with three farms, providing an additional service of on-farm resource-based consulting around infrastructure, labor force, efficiency and diversification design.

In Maine we recognize the need for a diversity of farms and scales of production, with the understanding that some of the bigger farms we have are sustaining some of the infrastructure, but that moving forward we need all kinds of farms to succeed. There is a lot of excitement building around startup farms and there is an increased support network to help them succeed: Maine Organic Farmers and Gardeners Association, Eat Local Foods Coalitions, Maine Farmland Trust, and Maine Coast Heritage Trust are some of the organizations working towards land conservation, support of local farm development, and consumer education. Professionals from these organizations, and many others, are collaborating in the process of informing the Maine Food Strategy which is in its fourth year of process development, working to establish a momentum to define the following goals: Economic Development, Healthy Food for All, Healthy Maine Environment, Vibrant Communities. The Gleaning Initiative considers itself part of the Healthy Food for All goal as we serve food insecure populations in Maine, and support local farming communities.



The Maine Food Strategy's Healthy Food for All goal is currently defined as "Quality food support systems help vulnerable populations access local food and support local farms and fisheries" (working document Maine Food Strategy). The definition of *quality food* is that it be safe, be produced using best practices, promote health, and use integrated pest management strategies. While *support systems* include formal and informal kinds of public assistance, federal, state and local assistance, private food assistance, non-profit organizations, innovative programs that address food security, families, communities, and faith-based organizations. Also defined by the Maine Food Strategy is the concept of *vulnerable populations* defined as food insecure or at risk food insecurity because of short term or chronic issues. The concept of *healthy food access* is that food be available on a reliable basis through purchase, public or private food assistance, or self-provisioning. The Gleaning Initiative fits within this umbrella of the Healthy Food For All indicator as a program launched by Healthy Acadia, a non-profit in the public health sector, supported by UMaine Cooperative Extension, working with organic farms, in partnership with the Hancock Food Security Network, directly serving food assistance programs, while developing innovative programming to encourage self-provisioning opportunities for food insecure community members.

The Gleaning Initiative has so far worked with over 30 farms to get 60,000lbs of food distributed among 15 food security organizations. However, it is not sufficient to measure the success and benefits of the gleaning activities by the number of pounds that it has recovered and distributed. This *Guide to Gleaning* sets out to map the different kinds of value created through gleaning activities and shows how farms might navigate these opportunities in the future as Surplus and Seconds Management Best Practices that works in conjunction with and parallel to the gleaning efforts of food recovery for assistance programs. Conversations with representatives of fisheries have begun to develop around what food waste prevention practices could best benefit fishing communities, food assistance programs and food insecure in the future, however the focus of this document is to communicate the work done to support farmers through their partnership with The Gleaning Initiative.



Maine is pioneering the four season farming, based on the fact that there is enough light to work with hoop houses and greenhouses without a lot of energy use. Four Season Farm Eliot Coleman's work in Downeast Maine has inspired a lot of farmers to extend their growing season and serve local markets through the winters. Some of these farms are strategically integrating new and old technologies available to them, such as solar, horsepower and sometimes wind, to work towards diversified non-polluting energy sources for year-round growing. Most gleaning in Hancock County takes place from March through December. The months of January and February are mainly dedicated to project improvements, research and innovation. However there is an opportunity to close that two-month gap, and provide more diversity of food year-round with the notion of lightly processing foods that are available during the higher volume growing months, to support year-round markets and food assistance needs. This option is currently in the R&D stage pending grant funding to run a pilot project using a Mobile Kitchen for in-field value-added production. The idea is to start with apple sauce from one of the most successful gleaning operations at Johnston's Orchard in Ellsworth, ME where currently we glean 5,000 + apples, but where much more can be gleaned if provided the right opportunities.

The main source of volunteers is the Master Gardener course at UMaine Cooperative Extension, where between 5-20 volunteers engage in gleaning programs around Hancock County from May-October. This creates a certain seasonality to gleaning that meets the demand for volunteers as well as the expectation of food assistance programs to have more fresh food during the growing months. However, other inroads are being made to develop partnerships with schools, adult education programs, and other at-risk prevention programs to integrate gleaning volunteerism as a safety net for year-round recovery programs, troubled youth, and others.

If we consider the EPA's food waste prevention hierarchy of what should happen with food that no longer has a found commercial use, the priority is always to get it to people. When working with farms the quality of the food is mostly perfect, it is usually the cosmetics that make it unsellable within the traditional markets that farmers tend to focus on: CSA, Farmers Market, Restaurants. However, what farmers are able to do with their surplus and seconds is determined by the resources they have at hand such as labor, transportation, or marketing.



On-Farm Gleaning

In the past, gleaning was a part of community life in what was mainly an agricultural society. The harvest was an event that did not happen within the private confines of a family-owned farm, but was a community event, even if happening individually for different farmers. For example, the wheat harvest was a central part of community life, and at the end there was always more to be gleaned in the fields. People knew when to come in and harvest the corners of the fields that farmers had left for them. Sometimes mandated by the church, other times it was just an unquestioned tradition, but gleaning was common practice. At the heart of this tradition were values of generosity, connectivity, exchange, and resourcefulness.

These days traditional gleaning requires that a coordinator role serve as intermediary between community members and farmers, due to the disconnection from our agricultural cycles. Not only do people not know what the opportunities are for gleaning at each time of the year, but there is a sense that farms are private property and that trespassing to gather food is a form of stealing. A mediation role is needed to support the rebuilding of direct relationships between neighbors and their farmers. Sometimes farms have been there for fifty years, and other times they are a start-up farm; in both cases, the value of connectivity goes a long way.

What we now call *Traditional Gleaning* is when we are invited by farmers to come to the farm to glean a certain product for which they no longer have commercial use. Because the Gleaning Initiative works with mostly diversified organic vegetable farms, the kind of products being gleaned at each farm is usually the same during any given season. For example from April-May there is usually a tendency to be gleaning spinach, usually from hoop-houses, so we can say that it is Spinach Gleaning Season. This kind of gleaning requires that we go out to the farms in volunteer teams and harvest the greens, store them and redistribute them to food pantries and meal sites as soon as possible to avoid storing the product unnecessarily for too much time. If there is more product than we are able to distribute, or the farmer has voiced an interest in trying to sell the products, we can support farms in selling their surplus at a discounted rate. Sometimes if the labor, transportation or marketing are obstacles to making the sale, the gleaning program will step in and provide that service for the farmer to successfully get the most value possible from the sale. In the future the gleaning program will be designing a social



business model that will provide the labor, transportation and marketing for surplus and seconds that are not finding a home within the farmers' own markets

In order to organize the most efficient gleaning operation, the information from the farmer about what needs to be gleaned is key: how much is there to be gleaned, when does it need to be out by, what is the limit of people you would like on the farm? These three pieces of information are enough to design the gleaning operation. Other influencing factors are the destination of the product or the distance between harvest and delivery as also playing a role in determining what food goes where and when.

On-Farm Gleaning Protocol (2-35 gleaners on-site):

Clear communication about expectations of gleaning: what, how much and how long?

Signed liability waivers for all volunteers that will be on-farm and orientation required

Bring containers that are different from the farmers', and minimize use of resources

Make sure tools are provided so not to use farmers' resources

Use unbleached 100% cotton rags to drape on sensitive produce right after harvest

Assign a point person that oversees the flow of the in-field gleaning process

Track all gleaned produce to provide farmers with records of how much they donated

At-Market Gleaning

Farmers put a lot of work into preparing for a farmers market, and often have to bring more than what they will normally sell, just so they do not risk running out of product. This can be one of the more frustrating aspects of preparing for a farmers market is that you don't always know exactly what is going to be sold. Therefore, at the end of market, more often than not there is



leftover produce that needs a home, and if farmers market do not have other markets that week, than that might be the best place pass the food on to the Gleaning Initiative.

If farmers have other farmers markets during that week then it is usually best for the farmer to take the product back to the farm so they can try to sell it again at other markets. One important aspect of communication between farmers and gleaning coordinators about Farmer's Market is getting specific feedback on when and where farmers would rather participate in gleaning. Sometimes farmers will rather take the product back to the farm and weigh it, and consider what might be used on the farm before sending out with the gleaning program. This will require an on-farm pick up later on, but is still technically a farmers' market surplus management best practice. Also, if the community is having trouble figuring out storage for the produce right after the market or farm-stand, having the farmer store the produce overnight or until food security organizations are open can be a better option.

In terms of the visibility created by at-market gleaning, there are different mechanisms to create a *buzz* that will benefit the gleaning program, its partners, and of course participating farmers. There needs to be a common thread and similar operational system that represents gleaning at farmers markets or at farm-stands, because that is the most public space for customers to see gleaning in action. Farmers markets are a great place to talk about gleaning in a celebratory and engaging way one-on-one with interested observers, but actually the goal of the gleaning operation is to be as inconspicuous as possible, and leave the visibility for the farmers. This is why the Gleaning Initiative adopted a strategy to always glean with yellow bins, so that the containers never got mixed up with farmers' containers and, so that the gleaners would be readily identified and recognized by the farmers.

At-Market Gleaning Protocol (1-2 gleaners on-site):

If farmers are expecting gleaning at farmers market then someone has to show up

Carrying the flashy yellow bins identifies gleaners at the farmers market



Place bins next to/under farm stands out of the way until farmers are ready
Farmers fill bins as they pack up their stand and sort through the food that is left
As soon as gleaners pick up bins farm initials get tagged on the crate
Bins are measured and tag is completed (6.20.15 / KHF / Beets / 30lb)

Garden-plot Gleaning

When farms do not have the amount of surplus that would make gleaning at their farm valuable, sometimes they will develop rows specifically designated for a social project. This requires that the Gleaning Initiative be mindful of how to bring volunteer labor into the farm on a more regular basis. Usually the supervision for these kinds of projects comes from the UMaine Cooperative Extension office, using Master Gardener Volunteers and being supported also by a farmer who want to dedicate some of his/her time towards the educational and social project.

Teaching people to value the food they eat is part of a bigger goal that most small-scale organic farmers have in common. This is because it really does affect their ability to expand in the community if they are able to engage people in developing a taste and a demand for their products. Usually this is not something that farmers can spend too much time doing directly. Some farms grow specifically for social projects that have a budget, and are sometimes also involved in supporting volunteers to produce food on their land. There is an opportunity for farms with a social interest to be connected through the Gleaning Initiative to different nutrition education and public health prevention programs that can become long-term clients.

As part of the Real Food On Campus campaign for hospitals and schools, there is a growing institutional demand for products that are locally grown and even sometimes organic. The farms that are closest to these institutions and that are able to develop relationships with them can provide a variety of services for institutions as part of wellness programs or green teams: providing space for community gardening, producing healthy cafeteria food, serving employee



CSAs, supporting the design of a kitchen garden or even waste management through picking up waste for animals or composting.

Garden-Plot Gleaning Protocol (3-4 gleaners)

Clear agreement between what the farmer can and cannot provide before season

Assign roles for the different volunteers so they can manage their schedule

Require that the group meet at least once a week for joint work day

Keep plot clean and follow farmers guidance on how the space should be kept

Document with pictures and other thoughts and quotes what the process is like

Try to bring the story of how the products were grown to the end-recipients

Seconds Gleaning

During the Fall and Winter, a lot of times the gleaning activities will revolve around sorting through products in cold storage and cellar to quickly identify the items that might be going bad soon due to time and conditions of storage. This requires that farmers label their crates of root vegetables, or their bags of potatoes, so that these can be sorted according to date, and then gleaned as close to before expiration as possible without it becomes inedible waste. When the farmer has more than what the gleaning initiative can distribute, market development strategies kick in, where we offer the products to partners in the Food Security Network, Schools and Hospitals, and other projects, at a reduced price, but still try to get a return for the farmer. This creates a new situation for gleaning in that we are longer responsible for the distribution, so the farmer can distribute their own seconds, usually making sure to piggy-back on exiting distribution routes so to minimize the overhead cost of an already reduced price item. For



example if they are going to the Farmers Market in a certain town where they have made a seconds sale, then they have the pantry director meet them at the pantry.

Seconds Gleaning Protocol (3-4 gleaners)

Establish a consistent schedule for going to the farm to sort seconds

Consider the work as a food waste prevention service for farms

Sales of items that are prioritized based on shelf-life will bring return to the farm

Items who are just passed prime will end up at meal-site or value-add processing

Consider the volunteer time having a value-added social impact (person in recovery)

Record the amount of time spent sorting and relate to amount of food recovered

Distribution Gleaning

Distribution companies often have an inventory that they are trying to work off and have to walk the balance between having enough food for their orders coming in and not over-purchasing from farmers and getting stuck with the product. In order to be able to provide a consistent gleaning service for distribution companies there needs to be high availability and flexibility of drop-off so that the transaction costs for the distribution company, of managing the delivery, do not exceed the value of having their waste disappeared.

In order to provide the kind of flexibility for distributors, farmers and gardeners to be able to deliver when they are able, but still have their products stored appropriately, a drop-off location per community needs to be designated. Self-managing drop-offs while simultaneously providing clear signage as to what products came from whom is the best balance for a food donations program.



Distribution Gleaning Protocol (3-4 gleaners)

Trust-based drop-off system with clear identification of where products come from

Refrigerated storage for perishable products: fruit, veg, dairy, eggs

A volunteer position that sorts through the food and keeps track of what is there

Document deliveries with pictures and also a spreadsheet (or automated system)

Communicate available foods to the food security organizations

Consider the sale of bulk items from a single producer to meet demands

Consider value-added processing for increased returns for farming community

Conclusion

This brief overview of how gleaning connections can provide support for farmers as they are developing an intentional surplus and seconds management system is meant to introduce the concept of gleaning as a service to farms. The flexibility of the work done under gleaning can help support the farms that partner with the Gleaning Initiative in ways that best meet their goals of sustainable growth. There is a lot more research that is needed in relation to whether there is enough unmet demand for local products that could be taken care of by a surplus management system that combined online and boots on the ground social platforms. However, in the meantime there are other programs that are providing grant money to farms, such as Maine Farmland Trust, and Mainers Feeding Mainers, to provide reduced price bulk items to food pantries and meal sites around Maine. These programs can also be seen as surplus management and are therefore worth considering for areas where there is still demand for local products and bigger connectivity barriers to gleaning, and a need to serve farms in this way.



More exploration of gleaning as a community safety net for both food insecure populations and the farming community needs to happen in Maine. Currently there are only three gleaning efforts in the state, and the biggest is Healthy Acadia and UMaine Cooperative Extension's The Gleaning Initiative in Hancock County with a sister project in Washington County. These efforts of trying to condense and model the gleaning programs that have started in the past three years is a helpful tool for farmers in other communities to encourage organization to take on gleaning to benefit their overall mission of feeding community members and meeting their own food security needs.

In recent months there has been an increased demand for sharing information on how gleaning works with farms and food pantries in our areas and there are innovative models and collaborations working themselves to the surface as a result of the newly made connections between farmers, community members, institutions and organizations serving the food insecure. There is a large potential for schools and hospitals to be a huge partner in developing more consistent mechanisms for food rescue and surplus and seconds placement as their goals move more in the direction of supporting local farms and the overall health of the community.

Gleaning can sometimes benefit farmers by using some of the contacts in the secondary food distribution network (food security organizations, schools, and hospitals) to sell their surplus rather than only donating it. This would still be meeting the EPA's hierarchy and creating a more tangible return for farmers, while also supporting institutions working with kids, seniors and disabled, and people suffering from chronic disease, with healthier and affordable options for sourcing local food. If we then consider all gleaning as a surplus and seconds management service, with market and charity destinations working alongside each other we can expand the benefits for farmers and ultimately collect more food and increase regional food security.

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