Producing Fresh Herbs for Fairbanks Restaurants

A market survey

A Senior Thesis

by Jacquelyn Denise Goss

Presented to the faculty of the School of Natural Resources and Agricultural Sciences, University of Alaska Fairbanks, and the Senior Thesis Committee: Meriam Karlsson, Chair; Hans Geier, and Kristy Long

In partial fulfillment of the requirements for the degree of bachelor of science in natural resources management—plant, animal, and soil sciences option

Fairbanks, Alaska, May 2007

Flat-leaved parsley grown in a local greenhouse.

--- Photo by Meriam Karlsson
Acknowledgements
I’d like to thank all my committee members for sticking with me since last year when I started this project. I’d also like to thank all the chefs and farmers who took time from their busy schedules to do interviews for this study, for the most part without a grumble, especially Adolf Garcia, who has passed on much of his food wisdom to me.

Abstract
Buyers and producers were surveyed to estimate the demand for fresh culinary herbs among chefs at local Fairbanks restaurants. When thirteen chefs were interviewed, twelve restaurants were found to purchase fresh herbs, primarily basil, parsley, and cilantro. During the summer, the restaurants combined purchased 68 pounds of fresh herbs per week, with 56 percent procured from local growers. Sixty-two percent of the chefs expressed a preference for locally grown products, including herbs. Local producers felt they were able to meet the demand for restaurant herbs and could accommodate additional clients. Many chefs, on the other hand, wished that tomatoes, vegetables, and potted herbs would be available for purchase from farmers in addition to fresh-cut herbs. While there was not a great demand for fresh herbs alone, farmers offering a variety of products can build sufficiently large accounts to justify selling and distributing to individual restaurants.

Introduction
According to the latest US Department of Agriculture trade survey (Kaufman et al., 2000), Americans purchase roughly half of their fresh produce through food service venues. This means that for every 100 unprocessed apples a person eats, 50 will come from restaurants or fast-food eateries. Forty-eight of the apples will be obtained from a retail store or supermarket, while less than two apples will come directly from the grower. To an agricultural producer, this means that as many consumers can be reached through food service venues as through retail outlets.

While selling to retail outlets will secure large and steady accounts with limited delivery costs for farmers, most retail outlets are owned by a few multiregional corporations. As members of these large corporations, retail stores operate with large purchasing power and volumes, allowing them to negotiate low prices in exclusive contracts with growers (Brester et al.,
2002). Many retail corporations have ownership in the various stages of food production and distribution, including cargo vehicles and entire farms (Kaufman et al., 2000). For a small-scale farmer in Fairbanks where wages are considerably higher than the national average, it can be difficult, if not impossible, to sell in volumes and at prices demanded by retail stores.

Restaurants, on the other hand, have more freedom to reach agreements with local producers. Chefs are often willing to accept and pay a higher price for a premium quality product. The purchased volumes are also more consistent with the amounts available from most local farmers, and packaging for restaurants is less restrictive because specialized containers and barcodes are not necessary (Shores, 2003).

Another benefit of selling to restaurants is that many chefs are educated consumers when it comes to fresh produce and herbs. The chefs are familiar with how to use, prepare, and present produce in meals and dishes. Through a middleman who knows the products, a farmer can introduce local consumers to new varieties and specialty crops. When consumers cook at home, they start asking for locally grown ingredients at farmers markets and other outlets in order to recreate dishes available in restaurants (Kaufman et al., 2000). In addition to educating consumers, chefs can also communicate to producers marketing trends, consumer preferences, and customer requests without delays.

For the restaurant chef, contracting directly with growers can mean a fresher product that hasn’t been exposed to various warehouses and climate-controlled cargo carriers. Fresh herbs in particular suffer reduction in quality because of their relatively short shelf life and the volatility of essential oils that give herbs their aroma and pungency (Dinstel, 2005). As an example, basil at 15°C will remain fresh and acceptable to most chefs for about 12 days. Below 15°C, the aroma and flavor of the herb begin to decline. At 10°C, buyers will start to notice discolorations or lesions in the leaves after 8 to 9 days. At 7.5°C, basil will lose marketability after only 5 days. Basil is one of several crops native to hot climates that are especially susceptible to chilling injury. This can make travel and storage difficult, because most other herbs store well at the 1 to 4°C usually maintained in refrigerators, storage warehouses, and climate-controlled cargo vehicles. In Fairbanks, most fresh herbs brought in by wholesale distributors have traveled at least a week before arriving at the restaurant, sometimes as many as ten days (Garcia, Pers. Comm. 2006'). A ten-day trip for basil can be perilous and chefs often have to reject the product because it is no longer useable.

Unfortunately for farmers in Fairbanks, reaching the tourist industry involves making widespread deliveries and setting up separate accounts as there is no local distribution system (Leiner et al., 2006). Because herbs are often used in small quantities, the cost of making multiple deliveries may be prohibitive. According to Shores (2003), a farmer specializing in commercial herb production can, in the right setting, make a fine living by selling fresh herbs exclusively to restaurants. However, in rural areas with few high-scale restaurants, the farmer will likely have to diversify accounts and crops to successfully produce for the restaurant market.

Fairbanks creates a unique situation for farmers and restaurants because of the distance to conventional large produce outlets. Chefs may be willing to pay a higher price for fresh cut herbs to compensate for the high farm wages in a spread-out Fairbanks community. The objective of this survey was to estimate demand for fresh herbs during the growing season among chefs in Fairbanks, and to explore the options a local producer has for meeting those demands.

**Literature Review**

Across the country, state and federal agencies as well as universities have conducted consumer surveys to estimate the demand for particular agricultural products. In Kentucky, the Department of Agricultural Economics (Woods et al., 2006) conducted a survey of restaurant buyers to determine the interest in locally grown herbs and to rank herbs in popularity with chefs. This study (Woods et al., 2006) found basil, garlic, chives, and cilantro to be of most interest to chefs, with an average 30 percent of chefs being “very interested” in purchasing these products from local suppliers. Sloan (2007) summarized future food trends as predicted by restaurant chefs and diners. Health-conscious foods and locally-procured meals were highest on diners’ demands. The study (Sloan, 2007) also discussed a trend away from typical American dishes toward ethnic foods such as Mediterranean, Latin American, and Asian cuisines.

Here in Alaska, I found two produce buyer surveys. The Alaska Division of Agriculture contracted a survey through AADLAND Marketing Group (2002) to assess the awareness, expectations, and perceptions that Alaska consumers have in terms of Alaska-grown produce. Most consumers held the belief that Alaska-grown products were superior to imported produce and even to organic produce, possibly because of the pristine environment throughout most of Alaska. More specific to restaurants is a survey conducted by the Alaska Agricultural and Forestry Experiment Station (Leiner et al., 2006) to determine the demand for baby salad greens among Alaska restaurants. The study found most chefs serving the tourist industry to have a preference for Alaska-grown produce, but many wished that these products were available through their existing wholesale supplier.

**Methods**

To research the market for fresh herbs among restaurants in the Fairbanks area, both producers and buyers were surveyed. On the buyer side, all restaurants that were assumed to purchase fresh herbs were solicited for interviews; this included upscale “fine-dining” establishments and larger-volume ethnic restaurants. Fast-food establishments and burger and pizza joints were excluded as these restaurants often only use dried or no herbs. Also, ethnic restaurants with a limited customer

Jacquelyn Denise Goss       Senior Thesis ST 2007-01
base were excluded because of the low volume of herbs that would be purchased. A similar survey methodology has been used earlier for determining the demand for salad greens among Alaska restaurants (Leiner et al., 2006). In all, thirteen chefs were available for interviews.

The majority of chefs were interviewed in person; those gone for the winter or far from town were interviewed by telephone. The interviews sought to determine which fresh herbs the chefs purchased and in what quantities. Chefs were asked if they had been approached to purchase locally grown herbs, their opinion of Alaska-grown fresh herbs, and their preference for organically grown herbs. A guideline for the interviews can be found in Appendix B.

On the producer side, three local farmers were interviewed to discuss the rewards and challenges involved in selling fresh herbs to restaurants. Producers were asked about their delivery and ordering procedures, which restaurants they sold to and how the sales from these accounts compared to farmers markets, community supported agriculture (CSA) or other marketing venues. CSA is an arrangement where families pre-order a weekly assortment of available produce throughout the season. The producers were also asked to divulge any tips on selling to restaurant buyers and niches that they felt new growers could occupy. These farmers were interviewed either on the phone or at a local agriculture conference. The survey questions are in Appendix D.

### Results of Restaurant Interviews

Twelve of the thirteen interviewed chefs responded that they purchase and use fresh culinary herbs. One chef claimed to only use dried herbs for cooking. Table 1 shows weekly quantities purchased throughout the summer. The combined total for the surveyed restaurants was 68 pounds of fresh herbs per week. Basil, parsley, and cilantro were most commonly used and made up 76 percent of the total. Table 2 illustrates herb usage by restaurant. While five of the restaurants used six pounds or more each week, the remaining eight used only three pounds or less.

Five restaurants claimed their primary provider of fresh herbs was a local producer, while two restaurants grew their summer herbs on site. For the five restaurants purchasing imported herbs, FSA (Food Services of America), a national distribution chain, was used most, followed by the retail supermarket Safeway. Eighty-three percent of the buyers reported several sources for acquiring fresh herbs. FSA, SYSCO, and Quality Sales are the three wholesale distributors servicing Fairbanks. Chefs patronize three retail stores, Sam’s Club, Fred Meyer, and Safeway, for fresh herbs. Local producers selling to restaurants included four local growers, three of whom were available for interview.

Eight of the twelve restaurants reported a general preference for locally grown herbs and produce. This preference was mainly based on freshness, and the availability of a fresher product, although a desire to support local agriculture and retain the money within the community was also expressed.

All the restaurants purchasing from local sources seemed satisfied with the quality and variety of herbs offered. One restaurant stated a desire for French tarragon, another for lemongrass and holy basil, and several wished that more tomatoes, baby squash, and other specialty vegetables were available. Seven of these eight chefs were willing to pay premium price for locally grown products. Three chefs were willing to pay up to $2.00 more per pound for certain locally grown herbs.

### Table 1. Summer use of culinary fresh herbs by restaurants in the Fairbanks area.

<table>
<thead>
<tr>
<th>Herb</th>
<th>Pounds/week¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basil</td>
<td>22.5</td>
</tr>
<tr>
<td>Parsley</td>
<td>17.5</td>
</tr>
<tr>
<td>Cilantro</td>
<td>12.0</td>
</tr>
<tr>
<td>Mint</td>
<td>4.0</td>
</tr>
<tr>
<td>Rosemary</td>
<td>3.5</td>
</tr>
<tr>
<td>Thyme</td>
<td>3.0</td>
</tr>
<tr>
<td>Oregano</td>
<td>2.0</td>
</tr>
<tr>
<td>Sage</td>
<td>1.5</td>
</tr>
<tr>
<td>Dill</td>
<td>1.0</td>
</tr>
<tr>
<td>French tarragon</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>68.0</strong></td>
</tr>
</tbody>
</table>

²Based on estimates given by chefs in personal interviews.
Table 2. Amount and source of herbs used by surveyed restaurants in the Fairbanks area.

<table>
<thead>
<tr>
<th>Restaurant</th>
<th>Pounds/week¹</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chena's Fine Dining at the River's Edge</td>
<td>14.0</td>
<td>Basically Basil²/FSA³</td>
</tr>
<tr>
<td>Lavelle's Bistro</td>
<td>11.0</td>
<td>Marilyn²/Calypso Farm²</td>
</tr>
<tr>
<td>Westmark Red Lantern</td>
<td>11.0</td>
<td>FSA/Sysco⁴/Safeway⁵</td>
</tr>
<tr>
<td>Lemongrass Thai Cuisine</td>
<td>8.5</td>
<td>Basically Basil/Fred Meyer⁵</td>
</tr>
<tr>
<td>Gallo's Mexican Restaurant</td>
<td>6.0</td>
<td>Sam's Club⁶</td>
</tr>
<tr>
<td>Gambardella's Pasta Bella</td>
<td>3.0</td>
<td>Safeway/Fred Meyer</td>
</tr>
<tr>
<td>The Pomegranate</td>
<td>3.0</td>
<td>Basically Basil/Fred Meyer</td>
</tr>
<tr>
<td>Pump House Restaurant and Salon</td>
<td>3.0</td>
<td>Onsite garden/FSA</td>
</tr>
<tr>
<td>Regency Cove Restaurant &amp; Lounge</td>
<td>2.5</td>
<td>FSA</td>
</tr>
<tr>
<td>Zach's Restaurant at Sophie Station</td>
<td>2.5</td>
<td>FSA/Sysco</td>
</tr>
<tr>
<td>Two Rivers Lodge</td>
<td>2.0</td>
<td>Onsite garden/FSA</td>
</tr>
<tr>
<td>The Vallata</td>
<td>1.5</td>
<td>Ann's Greenhouse²/FSA</td>
</tr>
<tr>
<td>Turtle Club</td>
<td>0</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>68.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. Based on estimates given by chefs in personal interviews. Restaurants surveyed are listed in Appendix A.
2. Local producer
3. Food Services of America (wholesale distributor)
4. Wholesale distributor
5. Retail store

One chef stated a 25 percent higher price, while the remaining chefs would not indicate an exact premium price tag. Four chefs favored organically grown herbs, but this preference was superseded by the desire to buy and use locally grown products.

Only one of the chefs, who did not report a preference for locally grown, expressed a specific bias against these products. Lack of oversight was the apparent reason for having doubts about locally grown crops. The chef reported not trusting the local producers to provide a quality product, saying, “You don't know what's in it, like what kind of chemicals or bugs, and you don't know if they might just be trying to get rid of their excess product...” regardless of quality. One chef was prohibited specifically from purchasing locally grown products by company policy. Several chefs mentioned that local grower prices were too high, ranging from $1 to $3 more per pound than wholesale prices. One chef stated that he would only buy locally grown herbs if they were as cheap as or cheaper than the wholesale distributor.

Results of Farmer Interviews

The main supplier provided locally grown herbs to three of the surveyed restaurants. This provider also distributed herbs to a restaurant not in the study. When asked if additional clients could be accommodated, the owner answered with a definite yes. In addition to herbs, she also provided baby salad greens as the “bread and butter” of her restaurant sales. She claimed that delivery was most important in dealing with restaurants. Prompt delivery of herbs cut the same day was vital, as well as a willingness to “go in the back door” and speak directly with the chef. Restaurant managers and desk attendants often seek to protect and limit traffic to the kitchen. Bypassing this obstacle was a more useful strategy and a similar approach worked well for interviewing the chefs in this study. In addition to salad greens, fresh herbs, and occasionally vegetables, including summer squash, the grower also sold small quantities of value-added products such as herb vinegars to restaurants. While the grower insisted that her dried herbs, another staple of her business, were far superior to their wholesale counterparts, competing with major brands such as Schilling/Mccormick was impossible.

Most of the other growers had deals worked out through connections or friends of the restaurant owner that were primarily based on availability rather than demand. For example, one restaurant stated buying surplus herb clippings from a local greenhouse. A local farm sold herbs to one restaurant, but only as an outlet for product left over after sales at a downtown market geared toward customers in the Women, Infants, and Children nutrition program or using food stamps. According to this
Figure 1. Origin of fresh herbs bought by restaurants in the Fairbanks area.

- Restaurants with on-site gardens: 16%
- Restaurants buying herbs from out of state: 42%
- Restaurants buying herbs from local growers: 42%
- Herbs grown in garden on-site: 7%
- Herbs purchased from out of state: 37%
- Herbs purchased from local growers: 56%
farm, the market for fresh herbs is less open than the vegetable market. With consumer education and a trend towards more ethnic foods, the fresh herb market is likely to expand. These growers also reported a demand for potted herbs that is not yet met. They had been approached to supply potted herbs for catered wedding receptions and as table centerpieces in another restaurant.

Another farmer, who supplies vegetables rather than fresh herbs to restaurants, stated that the lack of organization among growers hinders the ability to set up restaurant accounts. Often growers can only supply a portion of a restaurant’s needs, but multiple farmers carry costs for separate deliveries instead of collaborating and splitting expenses. Farmers also waste time soliciting restaurants that have already set up farmer accounts, while other restaurants remain untapped.

At a local producer conference, one out-of-state farmer was interviewed for an outside perspective. This farmer believed that virgin soils imparted an additional value to local produce because of the “un-mined” Alaska soils. Reduced need for pesticides in the cold and dry climate also contributes to the quality of local produce. He discussed the overall declining nutritional value of produce grown in the US. Using a refractometer, he was able to show a higher dissolved solid content of crops produced at his farm in Wisconsin. The recorded higher values suggest improved sugar content, nutritional value, and quality, and may be used as a marketing tool.

**Discussion**

The interviews with producers and buyers of fresh herbs reveal that the gap between supply and demand for restaurants is not large. Three of the four largest herb accounts already are consistently supplied from local producers and only in case of poor weather, pest outbreak, or other unforeseen events do they resort to a secondary supplier. Although the number of restaurants buying locally was equal to the proportion buying herbs from outside Alaska (Figure 1), the quantity of herbs purchased locally was larger. In other words, chefs purchasing the largest amounts of fresh herbs already buy from local sources.

The possibility of developing new restaurant accounts for fresh herbs does not seem promising based on these results. While three of the four largest herb accounts already are consistently supplied from local producers and only in case of poor weather, pest outbreak, or other unforeseen events do they resort to a secondary supplier. Although the number of restaurants buying locally was equal to the proportion buying herbs from outside Alaska (Figure 1), the quantity of herbs purchased locally was larger. In other words, chefs purchasing the largest amounts of fresh herbs already buy from local sources.

The interviews with producers and buyers of fresh herbs reveal that the gap between supply and demand for restaurants is not large. Three of the four largest herb accounts already are consistently supplied from local producers and only in case of poor weather, pest outbreak, or other unforeseen events do they resort to a secondary supplier. Although the number of restaurants buying locally was equal to the proportion buying herbs from outside Alaska (Figure 1), the quantity of herbs purchased locally was larger. In other words, chefs purchasing the largest amounts of fresh herbs already buy from local sources.

The interviews with producers and buyers of fresh herbs reveal that the gap between supply and demand for restaurants is not large. Three of the four largest herb accounts already are consistently supplied from local producers and only in case of poor weather, pest outbreak, or other unforeseen events do they resort to a secondary supplier. Although the number of restaurants buying locally was equal to the proportion buying herbs from outside Alaska (Figure 1), the quantity of herbs purchased locally was larger. In other words, chefs purchasing the largest amounts of fresh herbs already buy from local sources.

The interviews with producers and buyers of fresh herbs reveal that the gap between supply and demand for restaurants is not large. Three of the four largest herb accounts already are consistently supplied from local producers and only in case of poor weather, pest outbreak, or other unforeseen events do they resort to a secondary supplier. Although the number of restaurants buying locally was equal to the proportion buying herbs from outside Alaska (Figure 1), the quantity of herbs purchased locally was larger. In other words, chefs purchasing the largest amounts of fresh herbs already buy from local sources.
last summer with edible flowers in salads and as garnishes. The chef was surprised that the clientele, an older population, was often familiar with the nasturtiums and calendula flower heads and promptly began to pull apart the petals and mix them in with the food. The fresh flower heads not only add color to the plate, they also contain vitamin C and iron (Phillips and Rix, 1998). According to the Kentucky buyer survey (Woods et al., 2006), the number of chefs “very interested” in edible flowers was nearly as high as those interested in popular culinary herbs such as oregano, mint, sage, and thyme.

Given that restaurants often pay a premium for high-quality products, they do have special demands on their producers. When asked, most chefs stated that they place orders with the farmer twice a week and usually two to three days in advance. However, one producer noted that she often gets calls with an order the night before or even the morning of delivery. According to her, she “babies” these accounts to ensure orders of salad greens for up to 90 pounds per week at $8 per pound are filled along with the request of fresh herbs.

Delivery is essential; it must be on time and early in the day to accommodate the chef’s busy schedule (Watts and Watts, 1939). Essential oils have been found to break down in the afternoon heat, so the best strategy is to pick the herbs early in the morning and deliver them to the restaurant promptly to reduce the time the herbs are spent in high temperatures (Kaines, 1912; Shores, 2003). In fact, better freshness was the number one reason most chefs maintained accounts with local producers. The herbs are cut in the morning and delivered to the door. The study done by Leiner et al. (2006) found that most chefs in Alaska prefer buying through a standardized distribution system. When local herbs are not available however, several restaurants make trips to Fred Meyer or Safeway instead of purchasing from a wholesale distributor. These retail stores sell herbs for about 50 percent more than local producers and require someone on the clock to make the trip to the store. This shows the preference and commitment of these restaurants for quality over price and delivery.

Cleanliness of local produce was a noted concern among chefs. One restaurant experienced problems with bugs in the...
salad greens at the start of the previous summer. The producer agreed to triple wash the greens on the farm while the restaurant began giving one final rinse to the greens again before service. Herbs and other produce coming from wholesale distributors is rigorously cleaned and often irradiated to kill all pathogens (Vinning and Hemphill, 2001). Since most local growers do not have the capacity for special handling of the produce, care must be taken to wash and store herbs to prevent pathogen growth.

While all of the producers interviewed described their practices as organic, none is certified. This does not seem to have much bearing on the purchasing decisions compared to quality and freshness. Chefs admitted to a willingness to pay premium for locally grown products, but not necessarily for organic products. According to the Aadland Marketing Group (2002) survey, twice as many Alaska produce buyers stated the Alaska Grown label as very important compared to those stating the organic label as very important. Likewise, twice as many indicated organic was not at all important compared to those indicating Alaska Grown was not important. The report (Aadland Marketing Group, 2002) proposed that either Alaskans are less educated or concerned about organic products, or they perceive Alaska products as more “natural” than imported products. Another potential explanation is that tourists marvel at the fact that crops are grown in Alaska and enjoy tasting and eating genuine Alaska products. For businesses with primarily local clientele, it may stem from customers acknowledging the support to Alaska agriculture. One restaurant in particular noted that regular customers very much appreciated the use and support of locally produced crops. These findings concur with the report on food trends for 2007 (Sloan, 2007), where more consumers preferred locally grown over organically grown produce.

In conclusion, this study found that many chefs are willing to sacrifice time and money to purchase quality fresh herbs. All chefs expressed some degree of dismay with the quality of herbs making their way to Fairbanks after extended travel. There was a general preference among the majority of the respondents for Alaska Grown products. The poor quality of imported herbs along with a desire for locally grown foods have resulted in a demand for direct delivered fresh-cut herbs among chefs in Fairbanks restaurants. By educating chefs on new specialty items, a farmer can reach a large customer base for increased sales and
foster long-term promotion and use of fresh herbs. Chefs also are able to provide feedback, information, and suggestions to the farmer for desired types, stage of harvest, packaging, and trends in using herbs. After all, as Shores (2003) puts it “Chefs are the trendsetters in the cooking world. They dictate...what ends up in the retail marketplace.”

Challenges and obstacles selling to restaurants are not, however, uncommon. Staffing and management of restaurant kitchens tend to continuously turn over and change. Because new management can be expected to plan and approach menus and food preparation differently, a farmer cannot be assured of an account from one growing season to another. Most restaurants in the Fairbanks area use and buy fresh herbs in quantities that may be too small to justify the cost and effort of order preparation and weekly delivery. One option is to diversify and offer a larger array of products such as tomatoes and other vegetables. Collaborating with other farmers is another alternative, to consolidate orders for more efficient distribution and lower costs. Still, Alaska Grown products will need to be priced at premium in order to recover the high production and labor costs of Alaska. On the other hand, if farmers are prepared to offer quality fresh herbs and produce along with good service and timely deliveries, the chefs in Fairbanks appear willing to pay top dollar for locally grown fresh herbs.

Notes

2. Editors’ Note: Interviewees in general wished to remain anonymous for purposes of this publication, so appendices A (list of chefs) and C (list of farmers) of the original thesis have been removed.

Literature Cited


Kaines, M.G. 1912. Culinary herbs: their cultivation, harvesting, curing, and uses. Orange Judd Company: New York. Core Historical Literature of Agriculture. 2 Feb 2007. http://chla.library.cornell.edu/cgi/t/text/pageviewer-idx-c=chla;cc=chla;sid=d3e3944baa5141672d7c778c77755af;q1=restaurants;cite1=herbs;cite1restrict=title;rgn=full%20text;idno=2857325;view=image;seq=0009.


Appendix A

Respondents to Restaurant Survey
(not available)

Appendix B

Survey Questions for Chefs

1. Do you buy fresh herbs for the kitchen? If so, from whom?
2. Have you been approached by local farmers to buy fresh herbs? If so, did you decide to purchase them? Why or Why not?
3. Please circle the fresh herbs that you buy regularly and the quantities per week
   a. Basil  f. Thyme
   b. Cilantro  g. Sage
   c. Parsley  h. Dill
   d. Rosemary  i. Mint
   e. Oregano  j. Others: ________________
4. Are there any herbs you can’t get from local farmers?
5. Are local farmers able to meet your full demand or do you supplement with herbs from wholesale companies?
6. What is most important to you when deciding where to buy fresh herbs?
7. What mark-up, if any, would you pay for locally-grown herbs?
8. What mark-up, if any, would you pay for organic, locally-grown herbs?
9. Do you advertise the fact that you use locally grown products?

Appendix C

Respondents to Farmer Survey
(not available)

Appendix D

Interview Questions for Farmers

1. Do you supply any restaurants with fresh herbs? Which restaurants?
2. Which herbs do you produce?
3. Do you provide products other than fresh herbs to restaurants?
4. How often do chefs place orders and how much advance notice do you have to fill the order?
5. Are you able to consistently fill the chef’s orders?
6. Which herbs are most requested by chefs?
7. What are the greatest challenges in selling to restaurants?
8. How would you compare the profits from restaurant sales to the profits you get from other accounts?
9. Could you accommodate more restaurant clients?

Close-up of locally grown basil.
——photo by Meriam Karlsson
About the Agricultural and Forestry Experiment Station

The federal Hatch Act of 1887 authorized establishment of agricultural experiment stations in the U.S. and its territories to provide science-based research information to farmers. There are agricultural experiment stations in each of the 50 states, Puerto Rico, and Guam. All but one are part of the land-grant college system. The Morrill Act established the land-grant colleges in 1862. While the experiment stations perform agricultural research, the land-grant colleges provide education in the science and economics of agriculture.

The Alaska Agricultural Experiment Station was established in Sitka in 1898, also the site of the first experiment farm in Alaska. Subsequent stations were opened at Kodiak, Kenai, Rampart, Copper Center, Fairbanks, and Matanuska. The latter two remain. The Alaska station was not originally part of the Alaska land-grant college system. The Alaska Agricultural College and School of Mines was established by the Morrill Act in 1922. It became the University of Alaska in 1935. The Fairbanks and Matanuska farms are part the Agricultural and Forestry Experiment Station of the University of Alaska Fairbanks, which also includes the Palmer Research Center.

Early experiment station researchers developed adapted cultivars of grains, grasses, potatoes, and berries, and introduced many vegetable cultivars appropriate to Alaska. Animal and poultry management was also important. This work continues, as does research in soils and revegetation, forest ecology and management, and rural and economic development. Change has been constant as the Agricultural and Forestry Experiment Station continues to bring state-of-the-art research information to its clientele.

Fairbanks-grown cilantro. Cilantro is an herb once thought of as “fetid,” but is now growing rapidly in popularity, along with the Latin American cuisine that makes use of this flavorful plant.

University of Alaska Fairbanks
AFES Publications Office
P.O. Box 757200
Fairbanks, AK 99775-7200
fynrpub@uaf.edu • www.uaf.edu/snras
907.474.6923 or 907.474.5042
fax: 907.474.6184

Note: The Senior Thesis Series presents papers prepared for the course NRM 405-6, Senior Thesis in Natural Resources Management. Only those theses that are of exceptional quality are reprinted in this special publication series. Students are required to submit a project proposal for approval before proceeding to the thesis. The original theses are edited for posting on the SNRAS publications website. To view other papers in the series, go to www.uaf.edu/snaras/afes/pubs/SeniorTheses/index.html.

To simplify terminology, we may use product or equipment trade names. We are not endorsing products or firms mentioned. Publication material may be reprinted provided no endorsement of a commercial product is stated or implied. Please credit the researchers involved, the University of Alaska Fairbanks, and the Agricultural and Forestry Experiment Station.

The University of Alaska Fairbanks is accredited by the Commission on Colleges and Universities of the Northwest Association of Schools and Colleges. UAF is an affirmative action/equal opportunity employer and educational institution.