

Hoshigaki:

Preserving the art of
Japanese hand-dried persimmons



***Hoshigaki: Preserving the Art of Japanese Hand Dried
Persimmons***

prepared by

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EXECUTIVE SUMMARY

The purpose of this project is to identify ways to preserve the Japanese art of hand-drying persimmons in Placer County through increasing its economic viability. The information contained in this document is intended to provide Joanne Neft, Director of the Placer County Agricultural Marketing program, with an assessment of the current production and marketing systems as well as specific recommendations for improving the producers' economic returns. Specialty fruit producers and marketers, agricultural development practitioners, and others involved in targeting niche markets for agricultural products may also find valuable information in this document.

This report is organized into four sections. The first section provides a brief history of agriculture and persimmon production in Placer County. In addition, it contains a description of Japanese hand-dried persimmons and the cultural context of its production. The second section contains an assessment of the current production and marketing systems based on interviews with four Placer County *hoshigaki* producers. The third section is comprised of an analysis of opportunities for increasing the economic viability as well as a review of strengths and limitations. This section also includes a survey of six regional farmer's market managers in Northern California. The fourth section contains specific recommendations, which take into account the Placer County producers' goals and preferences.

1. History and Product Information

The Japanese hand-dried persimmon, also known in Japan as "*hoshigaki*," is a traditional Asian high quality dried fruit food product. Japanese immigrants brought the Oriental persimmon and the traditional drying technique to California in the late 1800s, but today only a handful of artisans in California, most of whom reside in Placer County, still practice the drying method. Producers peel each persimmon by hand, hang the fruits in the sun, and periodically massage each fruit by hand for several weeks to ensure even drying. Because the drying technique is both time and labor intensive, both the product and traditional processing method have become endangered not only in California, but throughout the world.

Hoshigaki has a long history in Placer County and is intimately associated with Japanese immigrants, their culture, and values. Because the drying process is deeply influenced by Japanese values of hard work,

perfection, and dedication, the resulting product is distinct from dehydrated and oven-dried fruit products.

2. Assessment of the current production and marketing systems

Hoshigaki producers in Placer County produce relatively small quantities of dried persimmons, usually less than 1,200 pounds (dry weight) annually per producer. Producers currently sell *hoshigaki* to wholesalers, retailers, and directly to consumers. Direct marketing outlets include farmer's markets, selling "on- farm," and through mail order. Labeling and specialized marketing strategies are used minimally.

3. Analysis of opportunities and limitations

Several opportunities exist to increase the profitability of *hoshigaki* production. Because today's consumer actively seeks information about products and is increasingly interested in healthy, nutritious, and "environmentally friendly" foods, *hoshigaki* is likely to be well-accepted beyond the traditional Asian *hoshigaki* consumer. In addition, *hoshigaki* is currently receiving unprecedented publicity. The recent film, 'Red Persimmon,' documents the drying process. In addition, the Slow Food Foundation for Biodiversity is publicizing *hoshigaki* as a food with special traditional and cultural significance.

At the same time, *hoshigaki* producers face serious challenges passing on the drying technique to future generations. Finding interested young people, hiring affordable labor, and competition from substitute products are serious barriers. Additionally, agricultural land in Placer County is increasingly being sold for suburban development. As more farmers reach retirement age and the Placer County population continues to explode, the existence of agriculture-related activities in Placer County is continually threatened.

4. Recommendations

From our perspective, the key to preserving the art of *hoshigaki* relies upon three initiatives: preserving the integrity of the drying process, education, and increasing profitability. Preserving *hoshigaki*'s unique heritage and the values associated with its production are critical to maintaining a unique, high-quality product. Educating consumers about *hoshigaki*'s positive qualities and the traditional drying process is essential to encouraging *hoshigaki* purchases by non-Asian consumers. Drying persimmons must be profitable for producers. From our analysis, it appears that increasing the sale price and diverting sales from wholesalers and retailers to direct consumer sales could increase profitability. Several opportunities for increased direct marketing are available. Collective efforts

among producers may allow producers to take advantage of direct marketing opportunities with smaller overhead costs.

5. Conclusion

Preserving Placer County's tradition of *hoshigaki* production is certainly feasible in light of today's consumer preferences and the high quality of the product. Perhaps the greatest strengths of the producers are their friendliness, strong work ethics, desire for perfection, and generosity. The implementation of any recommendations in this document must be carefully weighed against the eroding effect they might have upon the positive human characteristics of the *hoshigaki* producers themselves. Unlike other food products in today's American market, the integrity of the production process, which involves a close relationship between human beings and food, is central to maintaining the quality of the product. The distinctiveness of *hoshigaki* makes it a food worthy of saving as part of Placer County's agricultural tradition.

PLACER COUNTY

Geography

Placer County is a unique and varied county encompassing 1,431 square miles from the Sacramento Metropolitan area to the California-Nevada border. Two important geographical features in the county include Lake Tahoe in the west and Interstate 80, which runs in an east-west direction across the county. A wide variety of ecosystems occur along the length of the county, from the flat lands of the Sacramento Valley, to rolling foothills, to the mountainous Sierra Nevada Range.

History of Placer County Agriculture

Nisenan Native Americans originally inhabited the area that today is Placer County. The discovery of gold in 1848 brought an influx of Europeans to the region. Only three years later, Placer County was formed (PCPIO 2004). Agriculture developed as an important part of Placer County's economy after the gold reserves were exhausted. At that time miners began engaging in other wage-earning activities, including farming, harvesting timber, and working for the Southern Pacific Railroad (PCPIO 2004)

Fruit production was one of the main agricultural activities of Placer County from the late 1800s until World War II. Plums, pears, cherries and apples were the principle fruits produced (King and Feenstra 2001). Because Placer County's climate is mild, with warm days and cool nights, large-scale fruit production was very successful. However, fruit production began to decline between the 1940s and 1960s. Two factors contributed to the decline of the fruit industry. First, fruit growers in southern California became stiff competitors when supplemental irrigation became available to their orchards through the Central Valley Project. In addition, pear blight in the 1960s caused extensive damage to the county's fruit trees (King and Feenstra 2001). Because fruit trees require several years before they produce a sizable harvest, the transition into fruit growing from other crops and recovery of existing orchards from disaster and disease are historically very slow.

Placer County Agriculture Today

Agriculture in Placer County has experienced and continues to experience massive internal changes. Whereas fruit production played an important role in the past; rice, nursery products, livestock, and timber earn the greatest number of dollars today (Table 1) (Turner 2002). However, agriculture continues to be an important part of Placer County's economy. In 2002, the total value of agricultural production was over 76 million dollars. About 57% of the total agricultural revenue resulted from crops sales, 30% was from livestock and poultry sales, and 13% from timber harvest (Turner 2002).

Table 1: Top Five Crops in Placer County in 2002

| Crop | Value |
|---------------------|--------------|
| 1. Rice | \$15,383,800 |
| 2. Nursery Products | \$15,080,000 |
| 3. Cattle and calf | \$12,150,000 |
| 4. Timber | \$9,722,900 |
| 5. Chickens | \$6,507,000 |

(Turner 2002)

Fruits and nuts currently account for about 9% of the total value of agricultural products in Placer County (Turner 2002), however in the last two years, this proportion appears to be growing rapidly. Walnuts and oranges have the highest value of the fruits and nut category. However, the category of miscellaneous fruits and nuts, which includes persimmons, accounts for nearly half of the total value of all fruits and nuts. Placer County's fruit production is widely varied with over 23 types of fruits and nuts grown in 2002 alone (Turner 2002).

Table 2: Value of Fruit and Nut Production in 2002

| Crop | Value |
|--------------------------------|--------------|
| Miscellaneous Fruits and Nuts | \$2,935,900 |
| Total Value of Fruits and Nuts | \$6,934,500 |

(Turner 2002)

Today's fruit growers tend to have small or moderate-size family farms in the foothills in contrast with the larger rice and livestock farms found in the flatter areas (King and Feenstra 2001).

PERSIMMONS

Persimmons have been grown in California for over 130 years. The North American persimmon, *Diospyros virginiana*, is indigenous to the northeastern United States and produces small, edible fruits. However, the American persimmon is not widely cultivated and is generally limited to the eastern United States. Most of the persimmon varieties grown in the United States, and especially in California, were imported from Japan in the late 1800s and are varieties of the Japanese persimmon, *Diospyros kaki*. The Japanese originally obtained the Oriental persimmon from China and have since been cultivating it for over 1,000 years. The status of the persimmon in Japan is similar to that of the apple in the United States (Karp 2000).

Almost all of the persimmons grown in the United States are produced in California. In fact California production accounts for 99% of all persimmons produced in the United States (Turner 2002). Although Placer County has a long history of growing persimmons, it only produces a moderate amount of persimmons compared to other counties in California. In 1997, over 35 counties in California produced persimmons; thirteen counties produced substantially more persimmons than Placer County in 1997 (USDA NASS 1999). The greatest persimmon production occurs in the Central Valley and Southern California. The top five persimmon producing counties and their total harvest are listed in Table 3.

Table 3: California Persimmon Production by County (1997)

| County | Harvested Persimmons (Pounds) |
|--------------|-------------------------------|
| 1. Tulare | 5,789,762 |
| 2. Fresno | 4,924,535 |
| 3. San Diego | 3,570,952 |
| 4. Kern | 2,879,126 |
| 5. Yuba | 1,706,812 |
| 14. Placer | 255,383 |

(USDA/NASS 1999)

Reporter David Karp writes the following about the history of California production of Japanese persimmons:

California's recorded persimmon cultivation began with the importation of grafted trees from Japan in the 1870s, but in the early years, persimmons mostly served as a sideline, rather than a major crop. As the Asian-American population grew, however, small producers found they could sell their harvests at good prices. In the 1920s, as part of a general boom in subtropicals including avocados, dates and loquats, persimmon plantings surged from 500 acres to more than 3,000.

Substantial orchards were planted in Placer County and the Sacramento Valley, but three-quarter of the state's persimmon production was in Southern California, mostly in Orange and Los Angeles counties, where the trees were commonly interspersed in citrus groves.

While Los Angeles consumed a large share, shippers sent half the crop to eastern markets. The astringent Hachiya was the leading variety. Growers also experimented with dozens of others, such as the non-astringent Fuyu and the Hyakume, a brown-fleshed type renowned for its superb flavor.

As production increased, the Southern California Persimmon Growers Assn., formed in 1927, tried to promote persimmons to mainstream markets with recipe booklets, billboards and radio advertising. The fruit never became a staple, however, and in the 1930s, as a result of the Depression, overproduction and real estate development, persimmon plantings collapsed back to 500 acres, where they held through 1975.

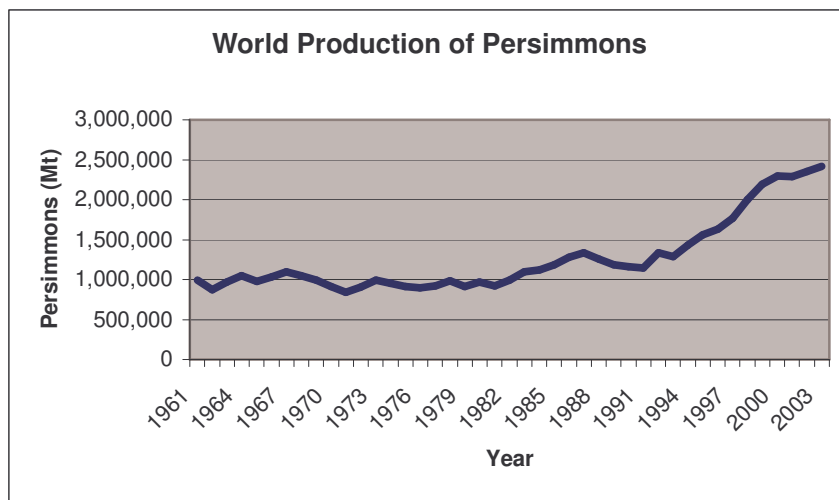
In the mid-'70s to mid-'80s, Asian immigration sparked the state's second persimmon boom, as it had the first. This time, plantings of the snackable Fuyu predominated over the Hachiya, and most went into the San Joaquin Valley and North San Diego County (Karp 2000).

The two most popular persimmon varieties grown in California are 'Fuyu' and 'Hachiya.' Fuyu persimmons are non-astringent, so they can be eaten like an apple when the fruit is relatively hard. Hachiya persimmons, on the other hand, contain significant quantities of tannins, creating a natural astringency that decreases significantly as the fruit ripens. Hachiyas can only be eaten when fully ripe and completely soft.

In California, mature Hachiyas persimmons are eaten fresh, but in Japan most are dried. Only a few growers still practice this drying tradition in California (Karp 2000), many of them residing in Placer County. In addition, growers in Placer County may have some of the few remaining unique persimmon varieties, like Hyakume, Saijo, and Maru (Karp 2000). Although these varieties are not the most common plants in their orchards, Placer County growers still make efforts to maintain some of these rare and precious trees.

In general, worldwide persimmon production is increasing, but persimmon production in California and Placer County is relatively constant. Total production of persimmons worldwide has been steadily increasing since the early 1980s (Figure 1) (FAOSTAT 2002). This may indicate that the persimmons may be gaining importance beyond Asian consumers. This outlook is supported by the fact that four of the largest producers of persimmons are non- East Asian countries, including Iran, Brazil, Italy, and Mexico (FAOSTAT 2002). Korea and Japan are the largest Asian persimmon-producing countries.

Figure 1: World Production of Persimmons (1961-2003)



(FAOSTAT data, 2004)

Despite the increase of production occurring on the global scale, persimmon production in California seems to be relatively stable. Persimmon production decreased only slightly from 1992 to 1997 in California. Total production was 25,266,000 pounds in 1992, and 24,756,000 pounds in 1997 (USDS/NASS 1999). The total acreage planted in persimmon increased slightly from 3,403 acres (1992) to 3,459 acres (1997). The number of farms producing persimmons decreased from 999 (1992) to 931 (1997). In addition, the number of farms that harvested persimmons also decreased, from 721 (1992) to 687 (1997) (USDA/NASS 1999). Even though the number of persimmon producers seems to be declining, historical data suggest that persimmon production in California can be expected to be stable, especially in the short term.

HOSHIGAKI ~ HAND - DRIED JAPANESE PERSIMMON

“I first encountered this plump, moist fruit years ago in Japan. Extremely handsome to behold, it looked like an artfully collapsed persimmon that had been dusted with floury sugar. The stems and calyxes were intact, and the flavor was pure persimmon— rich and fruity, but not sugary-sweet. It was, to say the least, memorable, for that was more than 30 years ago.”

(pers.comm. Deborah Madison, 2004)

Hoshigaki is the Japanese word for dried persimmon. Independently, *hoshi* means dried and *kaki* means persimmon. When the two words are joined together to refer to dried persimmon, the first *k* in *kaki* is dropped, replaced with a *g* and the two words become one. While *hoshigaki* can be translated literally to English as “dried persimmon,” this definition is not complete. The definition of *hoshigaki* must be considered in the context of the technique as well as the culture and tradition that surrounds it.

Hoshigaki is a traditional Asian, high-quality, dried fruit food product. Through the drying process, the color of the fruit changes from orange to brown. The calyx and stem remain connected to the fruit and act as an anchor during the drying and eating process. The natural sugars that come to the fruit’s surface give the dry fruits a white “dusted” appearance. The kneading process allows the whole fruit to dry evenly without slicing, so whole unwrinkled persimmons are considered the best *hoshigaki*.

The most common way of eating *hoshigaki* is by itself as a snack or dessert. Since each fruit is hand-peeled before drying, *hoshigaki* has a pleasantly soft and chewy texture. Its flavor is mild and sweet, similar to that of fresh persimmons but more intense. Because each producer uses a slightly different drying method, each producer’s *hoshigaki* is unique; fine wine has been used as an effective analogy to explain how this variation is actually seen as a positive quality among consumers. Each experience of eating *hoshigaki* brings new flavors and sensations to one’s palette.

It should be mentioned that *hoshigaki* is very different than other substitute products such as oven-dried or dehydrated persimmons. Whereas it takes several weeks to months to dry persimmons into *hoshigaki*, oven-dried or dehydrated persimmons only take several hours to prepare. While the traditional drying process results in soft fruits, faster drying methods

create unevenly dried, and sometimes hard, shriveled persimmons. *Hoshigaki* producers may cut blemished persimmons into strips after they have been dried using the traditional technique and sell them at a lower price, but even these “seconds” are distinct from oven-dried and dehydrated persimmons.

Hoshigaki tradition

The festive atmosphere of the outdoor fish markets was unforgettable. Large sea bream and salmon were displayed like prizes along with fish roe, dried persimmons and other goodies (Kiritani 1994).

Many Japanese have fond memories of sweet *hoshigaki* as an integral part of the winter holiday celebrations with their families. For the Japanese-American persimmon growers in Placer County, these memories are particularly distinct, as they continue to hand-dry persimmons for family and friends, despite the daunting amount of labor and attentive patience required. While younger generations pursue diverging interests, the technique of drying, which has been passed down from generation to generation, is slowly becoming a dying art. The diversity of tastes and qualities of *hoshigaki* reflect the unique techniques and innovations of each person, as well as the knowledge acquired from parents and grandparents.

The tradition of drying persimmons is practiced throughout Asia, particularly in China, Korea and Japan. Even in these countries, the tradition of hand-drying is slowly being replaced with oven-drying. As older populations pass away, the art and ancestral knowledge of hand-drying persimmons is threatened. Throughout Japanese history, persimmons have been an important fruit, and dried persimmons were especially important as a source of food during the winter. Along with dried chestnuts, *hoshigaki* were one of the earliest known sweets of Japanese cuisine (Inoki 2003). Before the introduction of sugar cane or sugar beets, *hoshigaki* was an important sweetener (Karp 2000). According to one persimmon grower, his father-in-law used to dip the dried persimmons into his coffee to sweeten it. Today, dried persimmons are used in a variety of recipes, such as persimmon punch.

Hoshigaki are also widely used during winter holidays, including New Year's. During this time, Japanese communities practice traditions that represent hope for a successful new year. People attempt to complete unfinished business affairs or tasks so that they can start anew in the New Year. The house is cleaned and decorated and special foods are prepared. Traditional rice cakes are decorated with dried fruits, such as *hoshigaki*. In addition to other traditional foods, *hoshigaki* are laid out on a small table as

an offering to the household gods (Festivals and Holidays 2004). In Korea, dried persimmons are also a popular food for New Year's Day. The following popular folk story demonstrates how valued dried persimmons are in Korean culture:

A mother and her child saw a tiger outside of their house. The mother tried to get the baby to stop crying. Only when she offered the baby some dried persimmons, would the baby stop crying. The tiger went away because it was surprised that dried persimmons had more power than he did (Baker, no date).

For today's *hoshigaki* producers, family habits and Japanese culture are important factors in determining the continuation of drying persimmons. Japanese culture has been influenced by Shintoism, Buddhism, Confucianism, and Taoism (Matsuda interview, 2004). Moreover, there is a strong tradition of family clan systems which even influences today's Japanese corporations (Matsuda interview, 2004). *Hoshigaki* producers have a sense of pride and devotion to their traditional consumers and to their family who have been placing orders for *hoshigaki* for many years. For example, a Japanese friend of Hiro Matsuda started buying dried persimmons from Hiro's parents as a college student. At that time he was poor and could only afford to buy two pounds each season. He continued to increase his purchases for many years while he became wealthier. Now he buys 30-40 pounds a year.

There are certain aspects of Japanese culture, such as an emphasis on perfection and a strong work ethic, which also play a role in continuing the persimmon drying tradition. According to Matsuda, one traditional value, the pursuit of perfection, has particular importance in his family. "There is no such thing as giving up, and everything needs to be perfect." Even though the producers may retire from their occupations, they continue working and drying persimmons. A Buddhist story reflects this desire to continue working:

An old Zen monk was once playing with kids. People felt sorry for him and took away his tools so that he wouldn't work. Subsequently, he stopped eating. When asked why he wasn't eating, he responded, "No work, no food." (Matsuda interview, 2004)

Matsuda sees similar ethics in his dad and himself. Although his father is in his mid-80s, he continues to labor over the drying persimmons, striving for perfection. According to Hiro, the cultural desire for perfection may hinder half-hearted producers to continue drying when they know that they cannot do a perfect job. This desire may also hinder producers from increasing the price for *hoshigaki*. The desire for perfection is not based on material gains but, rather, on a sense of satisfaction.

In Japanese culture, *hoshigaki* represents long life: the shriveled skin of the dried fruit is similar to the skin of older people (Traditional Japanese Dishes 2004). Ironically, the art of hand-drying persimmons is currently becoming extinct in areas where it was first practiced, as well as in the US, where Japanese-Americans continue the tradition.

Drying Technique

The acorn-shaped Hachiya is the persimmon variety which is normally dried. The astringency of the fruit is caused by the tannin content. While the fruit dries over a period of four to six weeks, it becomes sweet and a layer of sugar crystallizes on the skin. As it dries it becomes shriveled and loses a portion of its weight. Normally, about 10-15% of the drying persimmons are lost due to weather and “fruit drop” from the racks during the drying period. Although variations in drying methods exist, the following description provides a general guide to the drying process.

First, it is necessary to choose the persimmons at the right time. The quality of the dried product will vary depending on when in the season the fruit is picked, with a delay in harvest associated with increased sugars in the fruit. Persimmons are normally harvested in October. The persimmon must be picked so that the stem has an L-like structure, and can be tied and hung easily.

When persimmons are picked, the fruits are still hard and orange in color. The first step in the drying process is to peel the skin. Some growers choose to cut off the shoulder of the fruit so that it is more even. Also, it is important to leave some skin around the stem. Each persimmon is tied to the end of a string, with two persimmons per string. They are then hung over a pole. It is important that the string is sufficiently long so that when the persimmons are hung, they do not touch each other.

After four to seven days of hanging on the poles, the persimmons are massaged by hand for the first time. This is a critical stage in the drying process because some persimmons may not be ready to be massaged, while others will have already developed a hard outer skin, facilitating massage. The massaging helps reduce wrinkles, facilitates evaporation, circulates the contents, and breaks down fibers. Massaging also prohibits mold from growing in the wrinkles of the drying fruit. Although the persimmons may be left outside to dry on racks, rainy or moist weather will disrupt the drying process. In order to avoid morning dew, persimmons may be brought inside or covered at night. Too much sun may burn the persimmons, so overcast weather is preferred. If the weather outdoors gets too cold, many growers

will hang the persimmons inside and use heaters or fans to maintain optimal conditions.

After the first massage, the fruit dry for another period of four to seven days. Massaging may continue on a regular basis, although many growers insist on massaging at least once a day in order to ensure the best quality. After a period of four weeks, the persimmons should be ready to package, freeze, or store. However, the producer should still be careful because if the *hoshigaki* are not ready, they could develop mold while in the boxes.

The techniques of drying persimmons vary depending upon the growers. Although this may hinder any effort to standardize the product, the individual approaches of each *hoshigaki* producers are reflected in the nature of the product.

GROWER PROFILES

Because *hoshigaki* production is such a labor-intensive process, one of the most important aspects of its production is the people who make and sell it. In order to develop sound suggestions to preserve the traditional technique, it is necessary to understand the role that *hoshigaki* plays in the broader context of the producers' lives.

Based on our studies and personal experiences, we felt that it was important to get information from the growers themselves. We were interested not only in information about their final products, production systems, and current marketing techniques, but also about who they are as people. Numerous agricultural development projects have failed because they did not take into account the human dimension of the agricultural system they were seeking to improve. The superior quality of *hoshigaki* is ultimately derived from the producers' preservation of the integrity of the traditional drying process.

We interviewed four *hoshigaki* artisans in Placer County. We were delighted to find that the four *hoshigaki*-producing families that we interviewed, Tosh Kuratomi and his mother-in-law, Helen Otow, Dan Kajimura, Jim and Karen Brenner, and Hiro Matsuda (on behalf of his parents, Shinob and Ayako Matsuda) openly and generously welcomed us.

During our interviews we collected two types of information. First, we recorded technical information such as how they obtain the persimmons, how they dry them into *hoshigaki*, and where they currently sell their products. We also tried to gauge each grower's interest in trying different marketing techniques and their primary motivation for producing *hoshigaki*. At the same time, we also gathered social information related to each producer's history, cultural perspectives, inspirations, and individuality. We discovered that although there are certain similarities among *hoshigaki* producers, each producer's motivations and life history are unique. In one sense, this may influence the beautiful variety observed in the final product.

The results of these interviews are contained in the sections on current production systems and current markets. However, before presenting the results of the interviews, we thought it was important to first present the producers themselves. Inevitably, *hoshigaki* production cannot be separated from its social and cultural context. Therefore, the following section provides personalized information on *hoshigaki* producers, with an emphasis on the

role of *hoshigaki* production in the producers' families. Because of the individuality of each producer's drying techniques, it is important to highlight their own personal experiences and philosophies about *hoshigaki*.

Martha Miyamura

Placer County

by Deborah Madison

Cook, author, and conviva leader for the International Slow Food Movement.

From the article, "Japanese Massaged Persimmons," *The Snail*, (in press)

An elderly Japanese woman named Martha Miyamura practiced the art of massaging persimmons for twenty years. Mrs. Miyamura has since retired, but she has left instructions for the process, one that requires, quite literally, a great deal of hands-on work. This is not about slicing a persimmon and putting it in a dehydrator.

Persimmons ripen late in the fall when it starts to get foggy and damp, so before you even start, you need a special drying area. Mrs. Miyamura had made a hot house out of corrugated clear plastic, which she covered with plastic sheeting resting over PCV pipes. The sun heated the house, and a fan kept the air moving. If there was no sun, she brought in a heater.

The type of persimmon she used was the Hachiya, the large, acorn-shaped variety. She selected fruits that weren't yet soft, but which had all their orange color. (If they were soft to start with, they wouldn't dry, but the bright color indicated that the sugar content was high, so they would be sweet.) Next she peeled the persimmons, tied a piece of kitchen string around each stem, then hung them over wooden slats, taking care that the fruits didn't touch one another, as touching would blemish them.

During the first week the persimmons hung, they became soft. Then the massaging started. For three weeks to a month, Mrs. Miyamura would gently squeeze each persimmon, every day. This would bring the sugar content to the surface, which in turn would leave the fruits coated with a powdery coating of sweetness.

After three weeks, Mrs. Miyamura would taste a fruit to make sure it was still a little soft inside. If she felt it was ready, the persimmons came down. If not, they hung for another week. Then, they rested for five to seven days on paper towels. During this rest period, Mrs. Miyamura used her hands to flatten and shape the persimmons, so that the final fruit was beautifully folded and formed. Finally, she sorted them by size and packed into Zip-Loc bags. Mrs. Miyamura sold her persimmons by word of mouth, and at the Sacramento Sunday farmers' market for \$1 each, a small price to pay for so much attention and care.

Tosh Kuratomi
Otow Orchard
Granite Bay, CA

Tosh's enthusiastic and friendly personality reflects his approach to *hoshigaki*. He speaks about the process with great interest and openly shares his methods. He is devoted to continually producing *hoshigaki* at the Otow Orchard, which the Otow family has farmed since the early 1900s. His mother-in-law, Helen Otow, is the current owner and tenant of the 40 acre orchard. In May of 1942 the Otow family members were sent away to internment camps and returned sometime between 1946 and 1948. After their return to Placer, Helen's grandfather started farming strawberries, grapes and pears. Eventually, they planted persimmons and peaches, and started to produce *hoshigaki*. After retiring from teaching, Tosh started working more frequently at his family orchard.

When asked what the greatest challenge Tosh faces in keeping the practice of drying persimmons alive, labor and training of the process were at the top of the list. Training is needed because Helen Otow is 88 years old and a transfer of knowledge to the younger generations is needed to ensure that the tradition of drying persimmons will survive. Tosh and his children are familiar with the process and currently Tosh and his wife, Chris, are responsible for much of the drying. Their children come home fairly regularly to help out in the orchard during various crop harvests. Recently, however, their participation in the persimmon drying process seems to be getting less frequent. Tosh's worry is that the next generation will not take over the orchard and therefore not continue the drying as well as carry on the tradition. However, Tosh's employee, Rodrigo, dries about 100 pounds of the Otow/Kuratomi persimmons and Tosh says Rodrigo does a good job. Tosh realizes that it may very well be Rodrigo and his family that continue the drying on Otow Orchard.

Dan Kajimura

Lincoln, CA

Drying persimmons is a 50-year tradition in the Kajimura family home near Lincoln. Dan Kajimura learned the technique from his father. Currently, Dan is the only member of his family who actively produces *hoshigaki*. With the help of his mother, he satisfies his relatives' demands for hand-dried persimmons and also sells to established customers and some retailers. *Hoshigaki* is a delicacy that the relatives look forward to receiving every year. They send the *hoshigaki* that Dan produces to their extended family in Hawai'i, Japan and other parts of the US. According to Dan, the family started drying the persimmons for relatives, and later expanded to include some commercial customers. Each year his kids come back to help for some hours, but he does most of the required work. He used to give his kids a penny per peeled persimmon when they were little, but they are grown now and have other interests.

Dan emphasizes that everyone dries persimmons differently, and that each person has their own technique. He started drying when he was little and is very familiar with the process. However, he still has to treat each persimmon differently when he massages largely because each fruit is unique. Massaging is really a tricky process and it is hard to know how much to massage in order to get the expected outcome. Moreover, a lot depends upon the climate and the year. He insists that *hoshigaki* is "like a baby, and just not trainable." Therefore, he does not envision that the hand-drying method could be standardized in any way.

This is a particular issue for Dan because, unlike other *hoshigaki* producers, he does not grow his own persimmons but gets them from a variety of sources in exchange for the dried finished product. His persimmons vary because they come from different ecosystems and different soils. If he had to buy persimmons, he would not be able to continue drying because it would be too expensive. He also knows that there is demand for *hoshigaki* that is not satisfied, but in his case, supply will determine if that demand will be met. Dan plans on drying persimmons for as long as he is physically able to do so. He also acknowledges that *hoshigaki* "is a dying art."

Matsuda Family

Hiroshi (Hiro) Matsuda and parents, Shinob and Ayako Matsuda

Newcastle, CA

After Hiro Matsuda's father retired from gardening in the Sacramento area, he decided to fulfill his life-long dream to become a farmer. The elder Matsuda's have grown mushrooms, strawberries and grapes in the past. In addition, they planted persimmon trees 15 to 20 years ago. "Farming is a good way for my father to stay healthy," Hiro said. "Farming requires that you tend something...It's only when you quit caring for things that you go into decline. It's part of the Japanese way of thinking."

The elder Matsudas are fully occupied with the persimmons from October to December and do not even leave the house for more than an hour or so due to their dedication to creating the best *hoshigaki*. The living room becomes filled with drying persimmons during this time. They give the fruits vigilant attention until they achieve perfection.

The emphasis on perfection in Japanese culture shapes how the production and sale of *hoshigaki* is carried out. Hiro stated that in the history of Japan, perfecting one's craft or service led to being rewarded. "The way of the warrior is still deeply engrained – [it] will never be completely removed...There is no such thing as giving up and you want to get it perfect. This persimmon – it's just a pain... [but] when you put this all into context, it starts to make sense why they do what they do." Rather than being simply a dried fruit, each family's drying process produces a slightly different product. "Writing the process down is not the hard part...It's like wine. The process itself is standard but there are all these little factors that make the difference."

Hiro's parents do not produce *hoshigaki* primarily to earn income. Rather, for Hiro's parents it is more an expression of their inner characters. "Technically [my dad is] retired. [Noting] the Japanese belief – there are several beliefs that are so deep it's not really a religion. It's part of you. It took me over 50 years to figure this out." Although Hiro himself doesn't want to continue the process, he praises his parents for both their dedication and their *hoshigaki*. "They are both hard-working and intense – [they] want to do the best. Our family's dried persimmons are some of the best." Rather than making money, "It's about making the perfect product."

Jim and Karen Brenner

Brenner Ranch

Lincoln, CA

Jim Brenner bought his 41 acre ranch in 1976 and since then has planted 34 acres in fruit trees. Back then, Hachiya persimmons were the most profitable fruit coming out of Placer County and Jim recalls seeing drying racks all over the county bearing the slowly cultivated Japanese delicacy of *hoshigaki*. This technique was practiced extensively by Japanese farmers in Placer County 30-plus years ago.

Jim and his family first started drying their persimmons in the traditional way back in the early 1980s. They were introduced to the technique from a Japanese neighbor whose drying racks were visible from the Brenner's house. They also received additional tips and help over the years from the Kajimura family. During the drying season, late summer-early fall, Jim and his wife, Karen, spend between two and four hours a day, peeling, hanging and massaging their persimmons during the four to six weeks it takes for these delicacies to reach perfection.

The youngest Brenner boy will help occasionally with this painstaking process but it is speculated that a quick, sweet snack is a more likely motivation than a real interest in this dying technique. In fact, all over Placer County the art of cultivating *hoshigaki* is slowly receding from the cultural landscape as older generations pass on, younger generations move away and farmers, young and old, are offered steadily increasing prices to sell the farm for new subdivisions.

However, although Jim and Karen have wavered in the past (and even given up drying for a year or two) the pride they take in their product is evident from their willingness to share stories and tips with a friendly ear. The equal enthusiasm of their customers is apparent in the ease at which they are able to sell all the *hoshigaki* that they can produce.

In light of a mounting wave of information, publicity and recognition surrounding *hoshigaki*, there may be a chance to rekindle this labor-intensive practice, along with the cultural significance it holds. If demand keeps pace with the burgeoning publicity, there might be an increase in price that could make it profitable for small family farmers to continue to pass on this art. As for Jim and Karen, they say that they are willing to increase production if higher prices allow them to hire help.

CURRENT PRODUCTION SYSTEM

Farms and orchards

Hoshigaki producers fall into two categories: those that are also persimmon and fruit growers, and those who do not have their own orchards. For example, one producer has about 34 acres in a mix of fruit trees, while another producer relies on getting persimmons from other growers.

Labor

Most current *hoshigaki* producers are older Japanese-Americans, although there are a few producers who are not Japanese, but have learned about *hoshigaki* from their Japanese contacts. Most producers primarily use family labor, but may hire labor for the initial peeling and tying procedures. The older producers may be dedicated to producing high quality *hoshigaki*, but they are increasingly unable to maintain high production levels as they get older. For other producers, paid labor may be available, but current prices for *hoshigaki* do not encourage this kind of investment.

Production

The total annual *hoshigaki* production of the four producers we interviewed is about 2,500 lbs. of dried persimmons. Some of the producers may be able to increase production, but they are still constrained by insufficient drying space. Generally the available spaces are not the most efficient places for drying, and producers have commented that the lack of space is a hurdle for the growth of *hoshigaki* production.

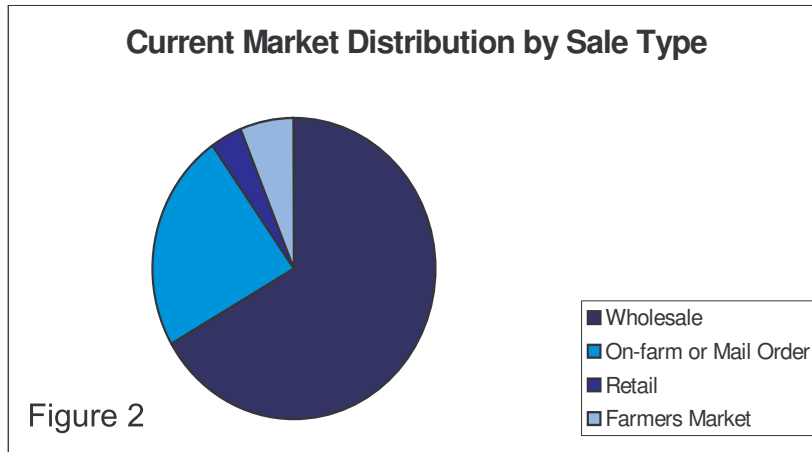
Hoshigaki producers currently use simple drying facilities. The persimmons are hung with strings over poles, which may then be placed on racks. Because of the nature of *hoshigaki* production, persimmons have to be moved inside and back outside regularly, depending on the weather. This laborious process involves moving each rack individually. In many cases, when the weather outside is unsuitable for drying the process takes place in basements, sheds, and even living rooms. One producer uses a separate small room for the *hoshigaki* when he brings them inside. However, this small space is inadequate, and he often uses all available spaces to hang the racks, including the ceiling beams. Although racks may be installed outside, the persimmons drying in the elements have to be managed carefully, and

cannot be left on the racks without daily surveillance. At the end of the drying process, *hoshigaki* is packaged individually, or in one or five pound bags, and shipped in cardboard boxes. Each dry persimmon weighs roughly 33 grams and measures about 4 cm wide and 8 cm long. Labels are rarely used. Storage spaces are usually garages and sheds, although some producers freeze their products.

CURRENT MARKETS FOR *HOSHIGAKI*

In order to identify new market opportunities for *hoshigaki*, we analyzed marketing avenues currently used by Placer County *hoshigaki* producers. We interviewed four producers using the interview protocol listed in Appendix D. The identities of the farmers who participated have been withheld in order to preclude the misuse of this information.

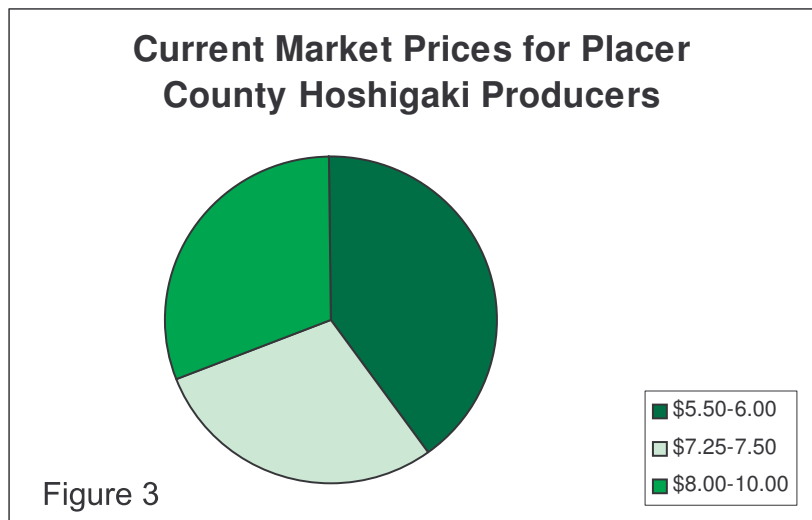
Results



Annual production levels range between 150 and 1,200 pounds per producer.

It is clear from Figure 2 that over two thirds of *hoshigaki* made by Placer County producers is sold to

wholesalers. Twenty-four percent is sold directly to consumers on the producers' farms or through mail order. Six percent is sold directly to consumers at farmer's markets while less than four percent is sold to local retailers.



As shown in Figure 3, *hoshigaki* producers currently sell their hand-dried persimmons for \$5.50 to \$10.00 per pound. About forty percent is sold for \$5.50 to \$6.00 per pound. Twenty-nine percent is sold for \$7.25 to \$7.50

per pound. Thirty-one percent is sold between \$8.00 and \$10.00 per pound. Of the *hoshigaki* sold in this price range 150 pounds is sold for \$8.50 per pound. It also appears that the majority of *hoshigaki* is sold at the lower end of this price range rather than the higher end.

Based on market research of retailers and urban farmer’s markets, Placer County *hoshigaki* producers may be able to increase their sale price significantly. As listed in Table 4, retailers and farmer’s market vendors (who are presumably producers themselves) are currently charging \$14.00 per pound, on average. It must be noted that this includes reported retail prices from Hawai’i where Japanese tourism increases demand for *hoshigaki*. Of course, it is not possible for Placer County producers to sell directly to this market. However, three of the four markets are in California, two of which are in the Bay Area.

Table 4: Reported Retail Prices for Dried Persimmons in California

| Sale Location | Reported Retail Price |
|--------------------------------|------------------------------|
| Ferry Building Farmers' Market | \$14.00 per pound |
| Bay Area Retailer | \$12.00 per pound |
| Hawai'ian Retailer | \$20.00 per pound |
| Santa Monica Farmers' Market | \$10.50 per pound |

Analysis

The distribution of Placer grown *hoshigaki* is currently restricted largely to Placer County and a few retail stores in the Bay Area. This limited distribution reflects the potential for market expansion. It is interesting to note that the *hoshigaki* that is sold in the Bay Area commands a higher price than that sold elsewhere in northern California. It is obvious from the data above that direct sale of *hoshigaki*, either on farm, at farmer’s markets or directly to retailers, generates a higher price per pound than selling to wholesalers.

All of the farmers interviewed are easily able to sell their entire crop of dried persimmons every year. Even the largest producer predicts that he could sell more *hoshigaki* on-farm and through mail order. This preliminary analysis indicates great opportunities for a shift in selling strategy through the diversion of wholesale to direct sales and through an increase in production. This analysis also suggests that producers' economic returns could increase if they are willing to increase their sale prices.

MOUNTING WAVE OF INTEREST IN *HOSHIGAKI*

The persimmon harvest and subsequent drying season of 2004 will find itself in the midst of a potential flurry of attention on both the product and the process of *hoshigaki*. Media attention for *hoshigaki* began in the fall of 2003 with the showing of “Red Persimmon”, a Japanese/Chinese documentary about the hand-drying process. The movie had a limited release in New York, but marks the beginning of increasing publicity for this special product. More recently the Hachiya persimmon appeared on the cover of the *Placer County Agriculture Guide* and included a story about *hoshigaki* and a local grower, Tosh Kuratomi.

Another element in the media wave will closely coincide with the timing of the 2004 *hoshigaki* harvest. *The Snail*, Slow Food USA’s newsletter, will feature *hoshigaki* in the August edition. This will be distributed to all Slow Food USA members as well as numerous parties aligned with the Slow Food movement and may very well signal a substantial body of epicurean “prosumers” (active, information-seeking consumers) to seek out the product, just before the dried fruit will be coming off the racks. This type of marketing publicity has proven highly effective with other products in the “Ark of Taste”. Growers must, however, be in a position to meet the potential demands of these new consumers, following on the footsteps of several Ark foods that have preceded *hoshigaki*.

History of the Slow Food Movement

“A firm defense of quiet material pleasure
is the only way to oppose the universal folly of Fast Life”
from the Slow Food Manifesto

Started in 1986, the Slow Food Movement is the brainchild of Carlo Petrini. Petrini, an Italian food critique, writer, and founder of Italy’s non-profit food and wine association, believes that industrialized food production has not only standardized food tastes but is also threatening thousands of food varieties and flavors. In direct response to the opening of a McDonald’s restaurant in Rome’s famous Piazza di Spagna, Petrini began speaking in public about his concerns and quickly created a following in Italy. His movement spread to Paris in 1989 with the founding of the International Movement of Slow Food and has since reached 42 countries and supports over 65,000 members (Chadwick 2002). Petrini defines the concepts of Slow Food as:

...an eco-gastronomic movement. We were born as a gastronomical association, paying attention to the traditional pleasure of table and wine, in order to oppose in some way the crazy speed of the 'fast life' – the way of life and food production that leads to the homogenization of flavor and the erosion of culture. However, we quickly realized that the flavors we wanted to save were closely connected to the work of people – of farmers, who with their ancient knowledge are the true custodians of biodiversity and the land. We had this fundamental realization of the connection between sustainable agriculture and gastronomic culture (Kummer 2004).

Petrini feels the US is “natural Slow Food territory” (Stille 2004). With 74 chapters and over 12,000 members, Slow Food is catching on in the States and some chapters are turning away members (Stille 2004). Interest in Slow Food is particularly high in the Bay Area with the help of Alice Waters and Chez Panisse, a well-known restaurant in Berkeley that features local growers, organic produce and specialty foods. The effects of exposure from establishments like Chez Panisse are very positive for specialty fruit products. Jim Churchill's Pixie Tangerines, an Ark food, from Ojai Valley, California are featured every spring on the dessert menu at Waters' restaurant. According to the pastry chef, Alan Pangren, “People know that we go to a lot of effort to choose absolutely the best fruit that we can find” (McLain 2002). What's more, exposure in restaurants can often lead to direct sales. When consumers are educated about a food's origin and given access to grower names, some often phone the grower and request boxes of produce sent straight to their home. Jim Churchill gets calls from people as far away as upstate New York for shipments of his Pixies (McLain 2002).

Slow Food sees the potential in the US because of the growth in organics, the rising momentum behind Community Supported Agriculture (CSA) and the recent boom in microbrewed beer. According to Petrini:

Up until ten or twenty years ago, you had two large companies [Busch and Miller] that dominated the beer market. Now you have 1,600 microbreweries. Equally promising is the rise of farmers' markets and [CSAs]....It is biodiversity from the ground up, with a new class of farmers in direct contact with consumers (Stille 2004).

Three initiatives are embedded in the Slow Food dogma, all of which focus on helping people grow, produce, and consume the right kinds of food: the Ark, the Presidia, and the Slow Food Award. The Ark is “a directory of endangered foods around the world that members rescue by enjoying them” (Kummer 2004). The Presidia is a grassroots organization that Slow Food utilizes to help create methods to make Ark foods available to the general public. Finally, the Slow Food Award brings “aspiring artisans and agricultural activists, mostly from the Third World, to international attention and gives them concrete assistance” in maintaining their livelihood (Kummer 2004).

The Ark was first introduced in 1996. Within a year, an official manifesto was created to outline the objectives of this faction of the Slow Food Movement. The Ark is concerned with saving the economic, social and cultural heritage associated with animal breeds, fruit and vegetables, cured meats, cheese, and cereals, pastas, cakes and confectionery. In preserving these food items and techniques, the Ark attempts to save “endangered tastes” by introducing nominated items first to Slow Food members and then the wider public through media, public relations and Slow Food events (Slow Food USA 2004).

The criteria for foods nominated as Ark items involve the ability for a food to create a “unique, pleasurable, high quality gastronomic experience,” a food or method of production at risk of extinction, foods that are produced or harvested sustainably, foods that are historically, socio-economically, or culturally tied to a specific region of locality, or foods that are cultivated or produced according to specific techniques (Slow Food USA 2004). Foods nominated as Ark items may not contain genetically modified raw materials and no transgenic breed or plant will be listed.

Deborah Madison (pers.comm. 2004) on *Hoshigaki*:

“It is culturally linked to Japanese-Americans, and may not be easy to find outside of that community. But as these delicious confections are rightfully considered a delicacy, and that there is a lot of craft involved in turning a large fruit in an exquisite dried one, I thought that these persimmons would be worthy of consideration for Ark status. I am thrilled to report that they have recently been accepted as a passenger on the Ark”.

The mission of Ark USA is to support high quality, small-scale food production; to rediscover, catalogue and describe foods and flavors in danger of disappearing from our tables; to protect biodiversity; and to champion the art of taste and the right to pleasure. Some Ark products include Heritage Turkeys, the Pixie Tangerine, Naturally Grown, Hand Harvested and Processed Wild Rice, Iroquois White Corn, the Elephant Heart Plum, Creole Cream Cheese, the Green Mountain Potato, and Red Abalone (Slow Food USA, 2004).

The Presidia, on the other hand, are local organizations that were created to help provide a consumer base for these Ark foods. A group of Slow Food activists, these individuals and groups put themselves at the disposal of artisans and conjure creative ways in which to assist them by alleviating bureaucratic issues and wading through paperwork (Kummer 2004). This is done by putting food makers in touch with one another and helping to introduce their products to restaurants and food-connoisseurs around the

world. Saving endangered foods is a way of achieving an even more ambitious goal: helping small-scale farmers succeed economically, protecting swaths of land, maintaining biodiversity, and preserving cultural heritage and traditional ways of life (Bacon 2004). Such examples are the Heritage Turkey and the Navajo-Churro sheep.

Slow Foods creating openings for small producers

Turkeys are often thought of as uniquely American. However, the very bird that America's forefathers cherished, a central symbol of sharing and thanks for the bounty of this land, has become virtually extinct. The American Livestock Breeds Conservancy (ALBC) lists eight turkey breeds on their list of "critical" species. The criterion for the critical classification is "Fewer than 500 breeding birds in North America, with five or fewer primary breeding flocks" (ALBC 2004). The Narragansett, the oldest turkey variety in the United States, and once the foundation of the New England turkey industry has been reduced to a breeding population of fewer than 100 birds (Slow Food USA 2004).

The modern day turkey is a far cry from the birds of yesteryear. In fact, today's turkeys are drastically different from the original species. The modern turkey is a veritable poster child for misguided agriculture. Patrick Martins describes the beginning and basic fate of the modern day turkey:

A few days after hatching, in the first of many unnatural if not necessarily painful indignities, it had its upper beak and toenails snipped off. With its altered beak, it can no longer pick and choose what it will eat. Instead, it will do nothing but gorge on the highly fortified corn-based mash that it is offered, even though that is far removed from the varied diet of insects, grass and seeds turkeys prefer (Slow Food USA 2004).

Unlike the commercially dominant Large White, the Heritage turkey can fly and breed naturally (Slow Food USA 2004). The heritage turkeys, are hardier than the Broad Breasted White turkeys (the pervasive industrial turkey), and farmers can raise them outside in fresh air, where they can have an opportunity to forage, both of which positively affects the quality of the meat. Beyond maintaining these varieties for the sake of biodiversity and preventing extinction of these breeds, heritage turkeys are simply better quality meat.

The heritage turkey became an Ark food in 2001. In 2002, 5,000 heritage turkeys were sold for Thanksgiving. In 2003, over 10,000 heritage turkeys were sold. This barely dents the 270 million industrial turkeys sold every year, but it is an important step in both the preservation of these breeds as well as a growing investment in a far more sustainable agriculture.

Several small farms are working hard to bring these turkeys back to the tables of America, reintroducing them to the commercial market. These farmers are also seeing the financial returns of their efforts. Heritage birds command a premium price. Frank Reese, an experienced heritage turkey farmer estimates that if properly done a grower can make \$60 - \$80 per bird. Reese sells his birds for \$4.00 per pound, compared to an average of .39 cents per pound for store-bought industrial turkeys (Corselius 2004). The efforts of Slow Food, ALBC, and the farmers are not only effectively maintaining these breeds, but creating an opening for these farmers to capitalize on a profitable niche market that appears to be growing with no slowing in sight.

Slow Foods as a tool for maintaining cultural heritage

The Navajo-Churro sheep breed is North America's earliest domesticated farm animal. The Churro Sheep were brought to the New World from Spain in the 16th century. The Navajo and Pueblo people saw the clear advantage of an animal that only needed to eat one-third of the time and could convert the coarse sage brush of the southwest landscape to high-quality meat and fiber. The Churro became common in Native American and Hispanic flocks of the high desert Southwest during the 17th century. By the late 19th and early 20th centuries the Indian wars and several ill-advised government breeding programs left only a few Churros in scattered pockets of the Navajo Reservation (King 2003). Once numbering two million, the breed was dissipated by a federally imposed interbreeding initiative and a government mandated livestock reduction program. By the 1970s, only 450 Navajo-Churro sheep were left in the United States (Slow Food USA 2004).

The hardy traits of the Navajo-Churro sheep are what made it suitable for the mountains and high deserts of northern New Mexico over the centuries. This connection with the environment linked the sheep with the people who also occupied this challenging region. From this linkage between environment, the sheep, and humans an agricultural tradition was born that continues to struggle to maintain its identity (King 2003). The resurgence of the Navajo-Churro sheep is directly connected to a revival of traditional Hispanic weaving in northern New Mexico. The wool of these sheep has been part of that weaving tradition for nearly 400 years (King 2003). The traditional handweaving of the area has always maintained an insistence on the highest quality standards. The wool produced by the Churro sheep is intrinsically connected to these standards. The Navajo-Churro sheep fleece come in a wide range of colors, which is one of its main attractions. A spectrum of 15 colors has been identified, ranging from white to black with shades of white, silver, adobe, red mesa, jaspered brown, and black (King 2003).

The connection to the Slow Food movement is a very basic one. The adoption of the Navajo-Churro sheep into the Ark reflects the important cultural traditions tied to the sheep. Robin Collier of Tierra Wools is trying to maintain these traditions, emphasizing that “[consumer’s] understanding of where things come from is almost non-existent. We go into stores and buy things without knowing where they come from.” Tierra Wools is helping create a forum that not only preserves this tradition, but that also shows people “how these things contribute to the cultural mix of northern New Mexico” (King 2003). As Benjamin Chadwick argues, “Clearly, Slow Food’s primary focus is not on saving endangered species but on saving endangered ways of life that revolve around the stomach. For Slow Food, it’s not just animals and plants that are threatened but also recipes, harvesting methods, and production techniques” (Chadwick 2002).

LOCAL FARMERS MARKETS

In an effort to identify direct market opportunities for *hoshigaki* we interviewed the managers of six farmer's market associations. Some of these represent single markets while others represent a group of markets within a given county (i.e. Marin and Sacramento). The following is a list of market associations that participated: Sebastopol Farmer's Market, Healdsburg Farmer's Market, Marin County Farmer's Markets, San Francisco Ferry Plaza Farmer's Markets, Sacramento Certified Farmer's Markets, Calistoga Farmer's Market, and Davis Farmer's Market.

The following analysis of the results of this survey is laid out according to the format of the interview protocol with a discussion of the results immediately following each question. These questions were designed to accomplish the following objectives: 1. understanding the general protocol for acceptance into markets; 2. gathering information on the current availability of *hoshigaki*; 3. elucidating the level of awareness of the Slow Foods movement in northern California farmer's markets.

Please see the Farmer's Market Guide in Appendix A for a list of farmer's markets, contact information, days and times, and links to information about state certification of health and safety, weights and measures and processed food registration.

Do you have growers who sell dried fruit and/or dried persimmons?

Four of the markets sold some sort of dried fruit but none sold dried persimmons. Gail Hayden informed us of Jim Russell from Russell Farms who sells dried Hachiya and dried Fuyu persimmons at the Santa Monica and Pacific Beach farmer's market in Los Angeles. These persimmons are sliced and oven-dried for 22 hours. Jim dries a few of his Hachiya's whole on trays, but does not hang them on racks. Jim does not use the term "*hoshigaki*" when referring to his products or drying process. These persimmons sell for \$10.50 a pound.

What is the process for new vendors who wish to sell at your market?

Each market has a different process for gaining entry but most require an application. Applications and information about specific markets can be

obtained via the farmer's market contact list provided in Appendix A. In addition to market specific requirements, there are rules that all California Certified Farmer's Markets (CFM) must follow. According to Paula Downing of the Sebastopol Farmer's Market, CFMs require that the vendor selling a product must have also grown that product. However, dried fruit falls under the category of "processed" food and can thus be sold by a third party or as a cooperative.

Do you have restrictions on what can be sold, who can sell, how many booths?

Most markets accept or reject sellers based on the current product mix at the market. Unique and novel items are more likely to be accepted than products that will compete with established sellers. For this reason we believe that "*hoshigaki*" has a good chance of acceptance at most of the markets we surveyed. Other considerations are organic certification, locality and seniority within the market association.

What is the stand fee (per month or year)?

Fees vary but are generally cheaper for smaller markets (\$14-\$17 per day), and more expensive at larger markets near urban centers (\$20-\$35 per day). In addition to stall fees, some markets charge yearly membership fees (\$20-\$30). The Healdsburg market charges vendors 10% of their gross for that day, not to exceed \$30.

Do you allow seasonal booths?

All markets allow seasonal booths and some markets are only open seasonally. Most of the markets are open through the time when *hoshigaki* becomes available (October – December).

Are you familiar with the Slow Foods movement, Ark food?

Four of the market managers we interviewed were familiar with the Slow Foods movement. The Marin and San Francisco markets are particularly active in Slow Foods. The organizing body of the SF market, the Center for Urban Education about Sustainable Agriculture (CUESA) is a member of Slow Foods.

Do you have any vendors that are affiliated with Slow Food or use Slow Food in their marketing?

The Healdsburg and Marin markets have vendors that market Slow Foods items. The SF market manager was not sure if vendors at Ferry Plaza market Slow Foods.

Do you think that vendors affiliated with Slow Food have any sort of marketing advantage?

Gail Hayden, from the Marin Farmer's Markets, thought that Slow Food had an advantage because it is linked with eating healthy and well. Paula Downing, from the Sebastopol market said that she thought about 50% of patrons from Sebastopol would know about Slow Foods but only 10% from other parts of the county. From this survey it appears that awareness of the Slow Foods Movement increases with proximity to urban centers. This may be a key factor in creating a marketing strategy for *hoshigaki* that incorporates Slow Foods recognition and/or that capitalizes on the upcoming publicity spawned by Slow Foods.

Have you heard of, or are you familiar with *hoshigaki* or dried persimmons?

None of the interviewees were familiar with the term "*hoshigaki*."

OPPORTUNITIES FOR CHANGE

Opportunities exist for Placer County *hoshigaki* producers to preserve the traditional Japanese hand-drying technique through increasing its economic viability. The opportunities identified in this section are based on three main goals: shifting from wholesale sales to direct sales, increasing the price per pound, and consciously educating consumers about *hoshigaki*. These objectives can be accomplished by targeting likely consumers, increasing direct sales, and differentiating *hoshigaki* from other dried persimmon products.

Strategies to Target Likely Consumers

“ Prosumers”

The concept of the “prosumer” provides useful insight into the potential consumers of *hoshigaki*. According to a global market research company based in Europe, the prosumer is characterized by a tendency to actively seek out information and opinions. These consumers also actively share their views with others, and combine ahead-of-the-curve attitudes and behaviors with a mainstream outlook. Prosumers are generally more aware of the nutritional and health value of the foods they eat. (Euro RSCG MVBMS Partners, no date).

According to Euro RSCG MVBMS Partners, prosumers can be summarized by the following characteristics:

- They are in control and future focused.
- They like to indulge the senses.
- They are proactive and fitness-oriented.
- They are techno-savvy and information hungry.
- They have a global outlook.
- They are brand aware.
- They seek value.
- They are involved in their communities and politically interested.

Prosumers are more empowered than the average consumer and take more initiative. They are intelligent and media and technologically savvy. They also value quality products and services. As active participants in their

consumption habits, it is essential for producers to build relationships with prosumers because they are “educated, proactive consumers” (Euro RSCG MVBMS Partners, no date). As such, they lead the market and help predict widespread demand.

The proactive characteristic of the prosumer indicates that an informative marketing strategy will help to increase and maintain the wave of recent attention for *hoshigaki*. Niche market consumers have narrowly defined or unique needs (Baker et al. 2002). There are particular prosumer populations in California that might be interested in a product such as *hoshigaki*, including those interested in health and wellness, Slow Food connoisseurs and certain ethnic groups.

Health and Wellness Marketing

According to a 2002 consumer survey by the Hartman Group, the total market for wellness products and services based on reported consumer spending is \$5.5 billion monthly (\$66 billion annually). The market is based on a large consumer segment. Health and wellness product adoption is so widespread that the demographics of the wellness consumer are nearly identical to those of the general population (The Hartman Group 2002).

These consumer trends have important implications for successful marketing of *hoshigaki*. Recent studies have identified wide ranging health benefits of the fresh persimmon fruit. Persimmons are superior to apples in terms of levels of dietary fibers, making them a superior product for an anti-atherosclerotic (or “healthy heart”) diet. Persimmons contain significantly higher levels of antioxidants than whole apples in addition to higher levels of sodium, potassium, magnesium, calcium, manganese and iron (Gorinstein et al. 2001). In addition to the nutritional benefits of persimmons, the fruit contains nutraceutical compounds including carotenoids, tannins and fiber. These compounds are active in the prevention of chronic degenerative diseases and have antiradical and antibacterial activity (Testoni 2002).

Studies demonstrating the effect of dried persimmon consumption vs. fresh persimmon consumption on heart disease, diabetes, or other health problems are not currently available. The convenience of consuming dried fruit, however, has shown to increase fruit consumption (Pollack 2001). Studies focusing specifically on the health benefit of dried persimmons should be undertaken in the near future as this may further promote dried persimmon consumption. Specific nutritional information of Japanese hand-dried persimmons is listed in Appendix E.

Market promotion and consumer awareness of the importance of fruit and vegetables as a part of a healthy diet contribute to increased consumption (Pollack 2001). Given the nutritional profile of persimmons, properly marketed *hoshigaki* has the potential to increase economic returns to producers by taking advantage of the thriving health and wellness market.

Another aspect of the health and wellness market is the recent low-carb craze that is based on reduced consumption of carbohydrates, especially breads and other grain based foods. According to a 2003 marketing report, 72% of consumers are likely to be on a low-carb diet (Hartman 2003). The implications of the low-carb craze are that *hoshigaki* qualifies as a low carbohydrate food and can be marketed as such.

Slow Food Connoisseurs

In the earlier section on the Slow Food Movement, we discussed the fact that preservation of culturally significant foods has become a higher priority for some consumers. These consumers tend to live in high-cost urban areas and have expendable income. Some have membership in the Slow Food organization. In the geographic area accessible to the Placer County producers, this area would include San Francisco and the surrounding Bay Area. These prosumers often buy produce and other food products at farmer's markets and natural food stores in addition to innovative restaurants and boutiques. They are willing to pay a premium price for recognizable quality.

One of the goals of Slow Food is to present traditional foods with non-traditional uses. By creating new ways to enjoy traditional food, the potential accessibility to the food is increased. Deborah Madison, one of the leaders of the Slow Food Movement in the US, feels that if *hoshigaki* is going to expand into new markets it will be based on people understanding the process. "People need to know how to eat it" (Madison, in press). The persimmon is a fairly obscure and unknown fruit on the American table. A dried specialty version of an obscure fruit makes it even more unknown. Therefore, education is central to the marketing. This is a common theme among foods in the "Ark."

Hoshigaki is not likely to become a major snack for mainstream Americans. Keeping in mind it is a specialty food, Deborah hopes her article in the August issue of the Snail will introduce a new population of curious and conscientious consumers. There may additionally be an opening for *hoshigaki* at high-end restaurants that seek out foods that are high-quality, culturally significant, and aesthetically pleasing. She feels like there are definitely new possibilities for Placer County growers to sell their

persimmons to discerning consumers willing to pay a higher price (pers. comm. Madison, 2004).

Marketing to other Ethnic Groups

Understanding the demography of California can help *hoshigaki* producers target potential consumers, since some ethnic groups are more likely than others to be interested in this product. In the 2000 U.S. census, it was estimated that only 0.9% of the Californian population identified themselves as Japanese but 10.9% self-identified as Asian. Therefore, the number of Japanese consumers in California is relatively small while the number of Asian consumers is much larger. Since Chinese and Koreans also consume dried persimmons, the Asian market constitutes a substantial number of people in California.

The practice of drying persimmons is common throughout East Asia, where the persimmon was domesticated. Like Japanese-Americans, Chinese and Korean-Americans buy persimmons, both dried and fresh. Persimmons are especially favored by these cultures, and a market may exist for *hoshigaki* outside of ethnic Japanese markets. Already, many Chinese-Americans buy fresh persimmons in bulk, according to Li Zhang, a cultural anthropologist at UC Davis. Zhang notes that a market may exist for dried persimmons among Chinese-Americans (pers. comm.. Zhang, 2004). The dried persimmons that are shipped from East Asia are not of high quality, and are probably dried using ovens. Marketing towards these populations can occur informally by advertising in ethnic newspapers, stores, and restaurants.

Another ethnic group that might be interested in consuming *hoshigaki* is Americans of Middle Eastern descent. Although no specific information is available about the number of people of Middle Eastern descent in California from the 2000 U.S. census, it is reported that there are large populations of wealthy first and second generation Middle Easterners, particularly Iranians in Southern California (pers. comm. Naziripour, 2004). Iran is actually the largest producer of persimmons worldwide, producing about twice as much as Italy and Korea, and more than six times the harvest of Japan (FAOSTAT data 2000). Iranians already like and are familiar with persimmons, but they generally consume the fruits fresh. However, eating dried fruits such as dates, raisins, cherries, apples, apricots, figs, and mulberries is a central part of many Iranian diets. Iranian culture tends to value refinement and quality in food and non-food products, thus making them likely consumers of *hoshigaki*. Californians of Iranian descent could be a good target consumer group for *hoshigaki* producers in Placer County. These suggested target groups are intended to convey the message that marketing should not be

limited to ethnic groups traditionally associated with persimmons or *hoshigaki*.

Strategies to Increase Direct Sales

Shifting sales from wholesale to direct marketing is an important part of increasing the profitability of *hoshigaki* production. Selling directly to consumers allows the producers to maximize their profit margin that would otherwise go to wholesalers. In addition, direct marketing allows producers to develop a relationship with the consumer while also providing the opportunity to educate the public. For *hoshigaki* producers there are three particularly promising avenues for direct marketing which include targeting urban farmer's markets, internet sales and agricultural tourism.

Targeting Urban Farmers Markets

Several facts, revealed by research into current markets for *hoshigaki* and interviews with farmer's market managers, suggest that targeting urban farmer's markets is a realistic way to increase profits for Placer County dried persimmon producers.

Hoshigaki may be able to be sold for a higher price in urban areas. Because the supply of *hoshigaki* is limited and demand is likely to increase, producers may be able to capitalize on higher sale prices. Unlike other farmers, *hoshigaki* producers may actually be "price setters" rather than "price takers". Compared to the \$8-10 per pound that farmers receive on-farm, *hoshigaki* retails for \$12-14 per pound in the Bay Area. At the Santa Monica and Pacific Beach farmer's markets in Los Angeles, dried persimmons from Russell Farms receive \$10.50 per pound. These persimmons are oven-dried and it is reasonable to believe that persimmons dried with the traditional Japanese technique are of higher quality and would thus receive a higher price. All of the Placer County farmers easily sell as much *hoshigaki* as they can produce. This also indicates that farmers would be able to receive a higher price if they asked for it.

Hoshigaki is able to draw a higher price (\$8-10) at farmer's markets and other direct sale outlets than when sold wholesale (\$7-7.50). The 600 pounds of *hoshigaki* currently being sold to wholesalers could realize a 10%-36% increase in gross profit if it was diverted to direct sale and sold within the current price range. Farmer's markets offer the most room for a price increase. If farmers asked the retail price for *hoshigaki* in the Bay Area, bypassing the wholesaler, the increase in gross profit would jump to 60% on persimmons currently being sold wholesale and 50% to persimmons currently being sold on-farm.

Because *hoshigaki* is a novelty item, producers have a high chance of acceptance into competitive farmer's markets. When asked about criteria for acceptance into farmers markets, all of the market managers listed novelty or uniqueness of the product as the highest priority. The importance of novelty is to avoid competition between newcomers and established sellers. There are a few farmer's markets from Placer County to the Bay Area that offer dried persimmons and very few that we have contacted who offer persimmons dried whole using the traditional Japanese technique. These facts indicate that *hoshigaki* would have a high probability of being accepted to one or more farmer's markets, perhaps even the most competitive markets.

The farmer's market managers we interviewed believed that awareness of the Slow Foods movement increases with proximity to urban centers. This would indicate that targeting urban farmer's markets would be an ideal way to exploit the recent and mounting publicity that the Slow Foods Movement has aimed at *hoshigaki*. Farmer's markets also offer an opportunity to build product recognition through sampling and direct interface between producers and consumers. However, an important part of this strategy would be to develop informative labels that can distinguish *hoshigaki* from oven-dried persimmons.

Internet Marketing

Using the internet as a marketing tool is an ever expanding and increasingly efficient and profitable way for producers to direct market to consumers. For small farms it has proven to be particularly powerful as there are few barriers to entry. Additionally, there are numerous sources of information and guidance dedicated to assisting farm operations, and it is a low cost/low risk opportunity to increase farm profits. Traditionally, farms have not had good opportunities to create a brand image for their farm and product. This is inherently limiting to their marketing ability. A website is a proven venue for consumers to see the values, character and vision of the farm enterprise. Additionally, location, particularly for rural farmers, does not become a hindrance to accessing a consumer base.

According to a USDA report of direct marketing on the internet from 2002, the volume of internet users shopping online has skyrocketed in the last several years. Of the estimated 168 million internet users 16 years of age and older in the United States, more than half (56%) say that they shop online. In contrast, only 31 percent of U.S. internet users were shopping online in 1998. Projected U.S. consumer spending for online retail purchases during the 2001 holiday season was \$11.9 billion, up from \$9.1 billion in 2000. (USDA 2002) According to eMarketer, a company that monitors

Internet and e-business worldwide, by 2005, e-commerce in the United States should surpass \$155 billion (Moser 2002).

There are numerous examples of farm enterprises that have carved out a successful niche for distributing their products online, allowing producers to access a global market. Furthermore there seems to be no limit to the scale at which an agricultural producer can find success. The spectrum runs from companies the size of Harry and David with \$450 million in annual sales (30% of which are from internet sales) to family farm operations that are looking to expand their consumer base on just a few specialty products (Krol 2002). Several other websites have been developed as a clearinghouse for small producer specialty items. These websites, www.localharvest.org for example, allow small producers who either do not have enough product or infrastructure to support an individual internet enterprise to still access this growing market.

As mentioned, there are several resources for assisting farmers in accessing both the technology of the internet as well as the marketing potentials. The USDA has several reports on marketing possibilities and strategies. The National Farmers Union actively promotes economic and cooperative development, with a heavy emphasis on creating value-added agricultural processing and marketing initiatives. Their aim is to enable producers to retain ownership of their commodity further into the processing channel, enhancing their returns on investment and getting more profit out of their production. Their website (www.E-cooperatives.com) is a step-by-step resource for internet marketing opportunities.

Hoshigaki producers in Placer County have the additional advantage of being connected to PlacerGROWN (www.placergrown.org). PlacerGROWN “is a nonprofit, membership organization formed to assist Placer County farmers and ranchers with marketing their produce and farm products. A goal of the organization is to bring farmers, ranchers and community members together to maintain and enhance the viability of agriculture in Placer County” (PlacerGROWN website, 2004).

One of the services PlacerGROWN provides is a web site to link the agricultural community to community members. The website provides an avenue for farmers and ranchers to advertise and it provides community members a way in which to find information about their local farmers and ranchers.

Agricultural Tourism

“The California Agricultural Homestay Bill, (AB 1258), passed in July 1999, paved the way for more farmers and ranchers to offer tourists overnight visits. The bill exempts farms and ranching operations that offer overnight stays from the more stringent requirements of operating a commercial restaurant. To qualify for overnight stays, the farms and ranches must produce agricultural products as their primary source of income. Additionally, farmers are limited to six guest rooms and 15 visitors a night - less than the amount allowed for a bed and breakfast operation.”
(Small Farm Center 2004)

There are numerous opportunities for increasing farm income through agricultural tourism. Agricultural tourism can increase income by providing increased consumer base for direct sales and fee collection from agricultural tourism activities. Table 5 presents a sampling of potential agricultural tourism activities that can be applied on farm. The type of agricultural tourism for a particular farm will depend on the resources and assets available.

Table 5. Examples of potential agricultural marketing activities

| | |
|--------------------------------|---|
| Agriculture Food & Craft Shows | Harvest Festivals |
| Educational or Technical Tours | Roadside Stands & Markets |
| Family Reunions | Self-Guided Driving Tours |
| Farm Work Experience | School & Educational Tours and Activities |
| Food Festivals | U-Pick Operations |
| Guided Crop Tours | Wilderness Experiences |

(Small Farm Center, 2004)

Apple Hill as a Local Agri-tourism Model



A regionally successful model of agricultural tourism is the Apple Hill Growers Association. This association has grown from 16 original ranchers to over 45 ranchers, including Christmas tree growers, wineries, and vineyards. Apple Hill is an excellent example of how agricultural tourism in Placer County can be used to support growers. “So much of the history of Apple Hill has been preserved. The community has gone to tremendous effort to protect their history and offer the public an opportunity to step back in time, if only for a day.” (Apple Hill website, 2004).

Hoshigaki producers and persimmon growers in Placer County could also use agricultural tourism as a direct marketing tool. Some producers

may not be willing to raise their current prices, travel to urban farmer's markets, or actively seek competitive direct marketing opportunities with distant consumers. Still, these producers may be willing to share the traditional Japanese hand-drying process and traditional Japanese persimmon varieties with others. This subset of producers could consider marketing mainly the drying process rather than *hoshigaki*. This strategy may be particularly appealing to producers who have difficulty hiring affordable labor or finding a new generation with whom they can share their experience and knowledge.

Agricultural tourism related to *hoshigaki* could also serve as a way of educating consumers about the drying process and the product. Since persimmons and *hoshigaki* are not well known beyond Asian consumers, agricultural tourism offers producers the opportunity to explain the cultural significance, the unique characteristics, and the health benefits of persimmons and *hoshigaki*.

In addition, several aspects of *hoshigaki* production lend themselves well to agricultural tourism. The beautiful drying racks that hang in the fall offer a point of attraction for farm tours. Participatory lessons on 'how to make *hoshigaki*' could be offered to school children and to the general public, offering free labor and a new educated supply of *hoshigaki* customers. Agricultural tourism in the fall and winter when persimmons are drying would coincide with the streams of tourists that come to the region to participate in Apple Hill grower activities. *Hoshigaki* producers could also provide agricultural tourism outreach at the annual Placer County Japanese Bazaar. If agricultural tourism activities could be held on-farm and engage consumers in the drying process, they might be willing to buy larger amounts of *hoshigaki*, fresh persimmons they could dry at home, and other farm products available for sale, therefore increasing total farm revenue. In this way, marketing the *hoshigaki* process could bring multiple sources of income to growers and producers in a manner that would allow them to avoid drastically increasing the price or the labor input needed to increase *hoshigaki* production.

Although direct marketing is the ideal, opportunities to sell directly to local retailers can be advantageous. An example would be Newcastle Produce. A 5th generation farmer, Janice Thompson is making local produce available to the Newcastle community in Placer County. Located right off Interstate 80, Newcastle Produce is the brainchild of Joanne Neft and the result of a great deal of hard work by Jan and her employees. The business is committed to being "the best source for locally grown, farm fresh produce, specialty foods, gourmet meals to go, and more" (Newcastle Produce website). The store showcases food from local growers, including some *hoshigaki* from

Otow Orchards. The store is beautifully designed, showcasing local produce and value-added products as well as a full deli and eating area. Janice offers cooking classes several times a month and also makes her products available online. In past years, online sales of boxed produce and other goods have been phenomenal and seem to be growing (pers. comm. Thompson, May 2004). In addition, plans are being made for an additional store featuring local produce and food products in nearby Lincoln, California.

Strategies to Differentiate the Product

Product differentiation is essential for a successful marketing strategy. For *hoshigaki*, this is perhaps the most important aspect of the marketing strategy. *Hoshigaki* has an array of unique characteristics that can be used to differentiate the product from other similar products. Marketing options include a focus on Japanese culture/history, a focus on health benefits, use of place-based or 'local' labeling and using varieties of eco-labels.

The key to reaching prosumers who seek out specialty products is branding the product in a unique way relative to its competition. The marketing literature describes many approaches that can be taken to choose a brand name, however three basic rules apply:

- 1) brand name should be easy to pronounce, recognize, and remember
- 2) should suggest something about the product's benefits or special attributes
- 3) should be distinctive and not carry a double meaning

(Baker et al 2002).

Two ways *hoshigaki* can be differentiated are labeling and point-of-sale materials.

Labels

Labels are an effective marketing tool because they allow the producer to differentiate their products from other producers and substitute products. Labels are often the first line of communication between producers and consumers. Labels create product recognition and ensure that if a customer enjoys the product they will come back and buy it again, rather than a substitute. Labels can also provide name recognition for the farm, which can aid in selling other farm products, as well as provide contact information for those consumers who want to see more, know more, do more or buy more.

Hoshigaki labeling could tell the consumer where and how the product was produced, designating the uniqueness of Placer County and the labor-

intensive drying technique. Such designations appeal directly to prosumers and can be utilized by *hoshigaki* producers.

Point-of-sale Items

Point-of-sale materials help sellers both promote and differentiate their products. These items can include pamphlets, recipes, trade publications, and small consumer gifts. This creates a method for producers to engage in public relations and also creates brand recognition among consumers. Point-of-sale materials help producers convince their consumers that their products have value.

With a specialty product like *hoshigaki*, potential consumers are not likely to be familiar with the item. In this case, consumer education is critical. Therefore, we created a pamphlet to be used to help buyers understand the unique attributes of *hoshigaki* and the process by which it is made.

Overarching conclusions

By improving the economic viability of *hoshigaki*, opportunities do exist for Placer County *hoshigaki* producers to preserve the traditional Japanese hand-drying technique. The strategies of targeting likely consumers, creating links to direct markets and differentiating *hoshigaki* are based on three objectives. By shifting from wholesale sales to direct sales in the form of farmer's markets, internet sales, and expanding agricultural tourism, *hoshigaki* producers will connect with potential consumers. This might also create the opportunity to increase the price per pound in addition to consciously educating consumers about *hoshigaki*.

Another way to increase awareness and preserve the quality of the product is to form a farmers association. This idea is different from a cooperative, where different farmers sell their produce together. A farmers association is a way to preserve the uniqueness that results from each producer's hard work, while maintaining the integrity of these hand-dried persimmons over oven-dried persimmons. In this way farmers can work together to preserve the quality of traditionally-dried persimmons over oven-dried persimmons without sacrificing the unique identity of their individual techniques and products. Lastly, such an association might increase the efficiency of the producers' efforts.

In this section, we have presented some important goals to increase profitability as well as a list of potential strategies to reach these goals. However, not all *hoshigaki* producers will want to incorporate all these

strategies. In the following sections, these ideas will be analyzed in light of the Placer County *hoshigaki* producers' circumstances.

STRENGTHS

Hoshigaki Strengths

Hoshigaki by its very nature embodies several strengths that will contribute to its success as a specialty product and enable it to retrieve a price that makes production more profitable for the producers.

Ability to be marketed as a specialty product

Hoshigaki is handmade and intrinsically linked to tradition. Unlike many other dried fruits, daily care is given to each persimmon for up to a month to produce the product. The difference is in the final product: a plump, powdery white and delicious *hoshigaki* is virtually unrecognizable from a typical oven-dried persimmon. It has a delectable flavor, and can be eaten as light snack or at a classy banquet.

Diverse Markets

The potential consumers possess important qualities that lend to the overall strengths associated with *hoshigaki*. The current consumers are mainly Asians who have contacts with *hoshigaki* producers, or presently purchase lower grade products at various Asian markets. The new consumers, a group generally known as prosumers, are willing to pay a high price for a succulent, exotic, healthy, and nationally recognized endangered food and taste. The strength of this group is their concern with nutrition, health, and setting an alternative lifestyle marked by a movement away from highly processed foods, willingness to try new and unfamiliar foods and reproach for irresponsible production methods. The Slow Food *hoshigaki* fits these criteria and has the possibility of moving *hoshigaki* into high-end consumption markets. At the same time, possibilities for market expansion in traditional Asian markets also exist.

“*Hoshigaki* is like wine”, as many growers say. It is an art through and through; with some marketing efforts, Placer County *hoshigaki* has potential to be become more well-known.

No added preservatives

The process, like the product, is all natural with no preservatives, chemicals, or sulfur added. This is an important value-added characteristic of *hoshigaki*. In an age where fruits are increasingly dried with sulfur dioxide or other aids, *hoshigaki* is a naturally delicious alternative.

| <i>Hoshigaki</i> | |
|------------------|-----------|
| ❖ | Exotic |
| ❖ | Expensive |
| ❖ | Exquisite |

Seasonality of the produce

The seasonality of the produce is linked with the use of *hoshigaki* in New Year's celebrations in Japan. There may be opportunities to capitalize on the seasonality of the product by marketing it as a holiday item here in the United States. At this time, it is fresh from the drying racks and the quality of *hoshigaki* is at its highest. Various stages of the drying persimmons could also be packaged with short expiration dates for consumers who value the special flavor of still-moist *hoshigaki*. Nevertheless, *hoshigaki* has a shelf life of up to a year if stored in a cool dry place. This allows *hoshigaki* to be sold year round, and removes the threat of spoilage associated with fresh fruit markets.

Grower Strengths

| The Grower | |
|------------|---------------------------|
| ❖ | Dedicated to Perfection |
| ❖ | Master of the Art |
| ❖ | Full of Ancient Knowledge |
| ❖ | Generous and Kind |

The growers possess several qualities that will help them achieve success in developing high-end markets for *hoshigaki*. First, they each highly value quality: they are committed to bringing each individual dried persimmon to perfection. Second, the growers have a history of producing *hoshigaki*. They know the unique details of the process, and many have extensive experience. Finally, the growers are kind and not out to gouge or destroy their local competition. This aspect will prove useful in any collaborative organizing they do, knowing that each is looking out for more than just their own self-interest.

Market Flexibility

None of the growers interviewed for this report were bound by contracts with any of their current distribution partners. This will allow them to move easily into new marketing venues or partnerships. This is an asset because it gives the growers the ability to assess the market and

determine if they would benefit financially from diverting their product from one market outlet to another.

Access to Placer Grown infrastructure

Joanne Neft and the Placer County Agriculture Marketing Program have created a substantial and fully-functioning platform from which Placer County growers can market themselves and access new clientele. The PlacerGROWN label is a powerful marketing tool that is intrinsically synergistic as it is an effective marketing umbrella under which all Placer County producers can provide information on their products. The PlacerGROWN website, www.placergrown.org, can serve as an information source for consumers on Placer County agricultural resources in addition to providing an internet link to individual producers' websites.

Willingness of Growers to Share Information

While there are a variety of techniques employed by the various producers of *hoshigaki*, all of the producers interviewed were very willing to share and describe in great detail the finer points of their technique. This openness to sharing the process creates a number of possible openings for the perpetuation of the process as well as on-farm educational programs. Sharing the process with interested people may prove to be a highly effective marketing tool, not only for *hoshigaki* but as a draw to all other commodities sold on farm.

LIMITATIONS

Farm Decline in Placer County

Placer has one of the fastest growing populations in California as well as the United States. The number of people living in Placer County has almost tripled since 1969 (King and Feenstra 2001). Nearly 250,000 people live in Placer County today and by 2020, the population is projected to grow by over 73%, adding an additional 182,000 residents (AgResource Associates and North Fork Associates 2002). Most of this population growth is expected to occur in the west portion of the county where access to jobs in the city is convenient. This area is a draw for residents who seek a high quality of life at the edge of the city, near natural amenities and with a rural, small-town lifestyle.

While the influx of new residents has resulted in overall growth in gross profits, employment, and total wages, the number of food wholesalers and retailers in the county is now declining (King and Feenstra 2001). Agricultural activities are occurring on less land in Placer County today than in previous decades. The number of acres dedicated to agriculture has declined 49% from 1945 (King and Feenstra 2001).

The number of farms is declining in Placer County, but the rate at which they are declining depends on farm size. The number of large farms (greater than 500 acres) has been relatively stable since 1945, but the number of smaller farms is decreasing. Mid-size farms (50-499 acres) have experienced the most rapid decline in numbers compared to small and large farms (King and Feenstra 2001). However, despite this decline, small farms (1-49 acres) still account for 79% of all farms in Placer County (Table 6)

Table 6: Number of Farms by Farm Size in Placer County (1997)

| Farm Size (acres) | Number of Farms |
|------------------------------|----------------------------|
| 1 to 9 | 311 |
| 10 to 49 | 405 |
| 50 to 179 | 133 |
| 180 to 499 | 79 |
| 500 to 999 | 34 |
| > 999 | 35 |

(USDA/NASS 1997)

In addition to decreases in the number of farms, the average age of farmers is increasing in Placer County. The average farmer was almost 57 years old in 1997 (King and Feenstra 2001), which means that by 2004 many of them are eligible for retirement. This factor alone could strongly influence the fate of agriculture in this region since many farmers sell their farms to suburban developers upon retirement.

The most important input to producing *hoshigaki* is the persimmon fruit itself. In the short term, *hoshigaki* producers and potential producers can expect the persimmon supply to remain stable. However, if many persimmon farmers sell their land to developers in the future, the persimmon supply will undoubtedly decrease.

Product Limitations

Overwhelmingly, the benefits of *hoshigaki* as a product outweigh its limitations, however a few limitations do exist. One major limitation is the fact that many Americans are not familiar with persimmons and therefore may be hesitant to adopt the fruit as part of their diet. The visual appearance of a finished *hoshigaki* is also not immediately appealing to a consumer unfamiliar with *hoshigaki*. For this reason, it is essential that the consumer be educated about the unique qualities of the product in order to overcome any cosmetic limitations it may have.

Commonly, persimmons are thought of as a bad tasting, puckery fruit due to the fact that people unknowingly attempt to eat astringent persimmons before they are ripe. Fortunately, all of these product limitations can be overcome through increased consumer education.

Competition and Substitute Products

Many substitute or replacement products for *hoshigaki* are available to the consumer. These substitute products include other dried fruits and dried persimmons not produced using the *hoshigaki* technique. A large variety of dried fruits are available on the market that range in cost from the very cheap (e.g. raisins) to expensive (e.g. organic specialty items) (Table 7). While the diversity of dried fruit products on the market indicates a strong consumer base for dried fruits, it presents a constraint to successful entry of new innovative products such as *hoshigaki* due to the lower prices of many replacement dried fruits.

Table 7: Prices for Replacement *Hoshigaki* Substitute Products

| Farm | Dried Fruit | Cost /lb. |
|-------------------------|------------------------|------------------|
| Bulk Foods online | Raisins | 2.50 |
| California Flavor | Figs | 4.30 |
| California Flavor | Apple rings | 4.45 |
| Biz Rate imported | Persimmons | 4.35 |
| Sun Organic Farm | Apple rings | 7.00 |
| Sun Organic Farm | Fuyu Persimmons slices | 9.95 |
| Sun Organic Farm | Pitted Cherries | 12.00 |
| Local Harvest (Organic) | Persimmons | 12.00 |
| Local Harvest (Organic) | Jackfruit | 24.00 |

Dried persimmons produced using methods other than the *hoshigaki* method are also potential *hoshigaki* competition. Dried persimmons are available in many forms in the current market. “Just Persimmons” is a persimmon product produced from Central Valley grown persimmons (Figure 4). The tub shown in Figure 4 sells for \$5.00 on the internet. Rancho Padre Organic Fruit (www.ranchopadre.com), a 9.5 acre certified organic farm located in the Central San Joaquin Valley, sells dehydrated persimmons on the internet (Figure 4) (Local Harvest 2004).

Competition exists for imported and locally produced *hoshigaki*. Currently, *hoshigaki* is imported into the United States from China and Korea. Asian food stores stock imported whole dried persimmons for purchase by their Asian customer base. However, the quality of imported persimmons varies and while some may be ‘hand-dried’ by a method comparable to *hoshigaki*, others are likely oven-dried. These products directly compete with Placer County *hoshigaki* producers by satisfying the large demand for the product by the Asian consumer.

Figure 4: Other Dried Persimmon Products



Central Valley
Dehydrated Persimmons
From www.justtomatoes.com



Central Valley
Dehydrated Persimmons
From Rancho Padre Organic Fruit



Korean dried persimmons
From Chungbuk, 2002



Chinese dried persimmons
From Made in China.com, 2004

Knowledge Transfer and the Case of *Hoshigaki*

During the 20th century, the U.S. witnessed a reduction of the number of farms, as well as an increase in average farm size (Gale 2003). Farming practices and culture reflected these changes, as many children raised on farms did not continue farming. The social consequences of farm children leaving agriculture affect more than just the demographics of farming communities in the U.S. The number of young farmers throughout the U.S. has been decreasing, as they face numerous entry barriers, notably a lack of financial resources (Gale 2003). As younger generations adopt urban lifestyles, the knowledge and family farm traditions to which they have been exposed, perish along with their departure from the farm. The negative consequences of this trend are currently being realized, as people acknowledge the social and ecological values of farming practices and rural culture. Scholars such as Kenneth Young have even suggested that “conservation efforts also need to be directed toward ideas, focusing on how the cultural experiences that embed and transfer those ideas could be maintained, or at least understood” (Young 2002).

The dying art of drying persimmons is one facet of California agriculture that is disappearing very rapidly. The tradition of *hoshigaki* has been an integral part of the rural landscape of Placer County, and, even now, still reflects a history of cultural and ethnic diversity in the farming communities of California. As the sons and daughters of *hoshigaki* producers take up non-farm occupations, they are unable to stay at the farms and do not engage in the labor-intensive process of drying persimmons. The practice of *hoshigaki* is therefore relegated to the older family members who still live in rural areas and who have the time to devote to the process.

This, of course, lends itself to a transfer of knowledge that may not remain within the Japanese culture. Because most Japanese farmers in Placer County are getting older and many of their children are not interested in continuing the growing and/or drying of persimmons, the operation of hand-drying might become the job of residents outside the Japanese community.

Cultural barriers

The importance of producing a *perfect* product is a central motivation to many Japanese-American producers. This motivation may lead many current *hoshigaki* producers to invest time in improving the quality of the product, even though they know that they won't be financially compensated for all of that time. The strive for perfection is rooted in Japanese culture,

and the emphasis on perfection may hinder half-hearted producers from continuing because they cannot produce a perfect product. Moreover, family members and friends have certain expectations about the quality of *hoshigaki*, which the producers attempt to fulfill. Japanese-American producers have been active in teaching non-Japanese persimmon growers how to dry the persimmons. For good or bad, these new producers may not exhibit the same emphasis on perfection which is rooted in Japanese culture.

Persimmon supply

The decline of persimmon production in Placer County presents a barrier for some *hoshigaki* producers, who do not have their own orchards. For example, Dan Kajimura relies on getting fresh persimmons from other producers to dry in exchange for the finished *hoshigaki* product. As more orchards are destroyed, he notes that obtaining persimmons may become more difficult for him. This may also be a problem for older populations of *hoshigaki* producers, who can no longer manage orchards, but who can still produce *hoshigaki*.

RECOMMENDATIONS

The purpose of this project is to provide information that can be used to preserve the waning art of *hoshigaki* production in Placer County, along with the cultural heritage it represents. In the previous sections we have presented the results of our research on (i) the local history of *hoshigaki*, (ii) our assessment of the current production and marketing of *hoshigaki*, (iii) the burgeoning interest in *hoshigaki*, and (iv) examples of successful agricultural marketing strategies in the form of opportunities that may exist for future marketing of Placer Grown *hoshigaki*. Thus the recommendations we make are aimed at three objectives: shifting from wholesale sales to direct sales, increasing the sale price, and increasing consumer education. These three objectives are intended to improve the viability of continued *hoshigaki* production by increasing profitability. Specific strategies were also presented that can give producers practical ideas about how to accomplish these goals.

The Opportunities for Change section of the report detailed the various strategies that may provide the producers of Placer County a more sustainable production model. However, we feel it is necessary to place the insights we have gained from this study within the context of our original reasons for undertaking this project.

To begin with, we would like to acknowledge the fact that farmers, like everybody else, make decisions on a day-to-day basis and are not solely driven by the desire to maximize profit. We also understand that any meaningful strategy to increase profitability must take into account the wants and needs of farmers and their families, as well as farm specific resources and limitations. These “wants and needs” may include complex feelings specific to the cultural or familial significance of *hoshigaki* to the producers.

Increasing the awareness and profitability of *hoshigaki* should never come at the expense of the cultural and familial significance surrounding this process or the quality of the finished product. The characteristics that make *hoshigaki* unique and worth preserving have attracted the Slow Foods movement and other pro-active consumer groups. Consequently, our advice is to, above all, maintain and preserve the quality and integrity of the *hoshigaki* process and product. After seeing firsthand the pride producers take in the quality of their *hoshigaki*, this should not be difficult.

Our first recommendation is to acknowledge the importance of education, which is paramount to preserving the technique of producing *hoshigaki* along with the culture and heritage it represents. To this end, we have created an informational pamphlet about this unique delicacy. It is natural to assume that an increase in awareness of *hoshigaki* will create an increase in demand. Thus, education can serve both goals of increasing consumer awareness and producer profitability. In addition, education about *hoshigaki* can highlight the cultural heritage and diversity of agriculture in Placer County.

Recommended strategies derived from this research can be divided into three sub-groups: targeting consumer groups, increasing direct sales, and establishing product differentiation. In order to best utilize the information provided in this report, producers will need to identify and target their marketing towards groups that will be most receptive to their product. Some of the groups that fit this criteria listed in the report are prosumers, urban farmer's market clientele, internet consumers, and specific ethnic groups. While this by no means is the whole list of possible target groups, the findings of the report indicate that these are populations that would likely be interested in products similar to *hoshigaki*.

The second recommendation involves shifting distribution away from indirect markets (such as wholesale) towards direct marketing to conscientious consumers. Urban farmer's markets, internet marketing, and agricultural tourism are avenues growers may utilize in accessing and selling to the aforementioned groups. All of these are based on forging relationships between grower and consumer, void of any middlemen. The result is not only a higher potential for profitability but also a far greater connection between the people who are producing the product and those people who enjoy the fruits of that labor.

Both the producer costs and risks associated with direct sale are higher than wholesale, which is why farmers often choose to sell to wholesale outlets. However, we believe there are at least two reasons to suggest that a switch to direct sales would be profitable. One advantage of niche markets is that it allows farmers relative freedom in setting prices. This is a luxury that large producers who deal mostly with wholesalers definitely do not have. *Hoshigaki* is a product that must decidedly turn a profit based on quality, not quantity. Producers currently have no problem selling their entire crop. It is precisely this lack of supply that will allow farmers to set a higher price.

The third recommendation is based on product differentiation. This can be at the level of the individual producer or as a collective effort under the auspices of a grower association. Labeling and branding is the most

important feature of this strategic component. It is essential that consumers are provided with information, both written and experiential, by which they can connect the product to its producer. These types of relationships can foster connections to other items the producer sells in addition to *hoshigaki*.

When examining the possible opportunities for change, producers will invariably select the strategies that will best fit their needs and resources. Among the Placer County growers that we met and interacted with, there appear to be two types. First, there are the growers, most of whom are older, who will not likely be interested in initiating the majority of the marketing strategies outlined in the report. Their *hoshigaki* production is much more based in tradition than profitable enterprise. However, this group is pivotal in perpetuating the process by education and example. It may very well be this population that helps increase public exposure to *hoshigaki* by making the process an experience in which conscientious consumers can partake. The second group of growers is more connected to the profitability of the product and to receiving a price that is more in keeping with the effort necessary to produce *hoshigaki*. The recommendations in the report will hopefully provide a number of resources for accessing the consumer-base and venues where a higher and more appropriate compensation can be achieved.

If the overarching recommendations of this report were to be reduced to three points they would be that Placer County growers shift their distribution from wholesale to direct marketing, increase prices, and create materials and opportunities to educate consumers. Beyond the intrinsic worth of *hoshigaki* as a product, the character of the growers and the integrity of the process add value that is not currently being realized. This report indicates there are several avenues by which growers can increase the viability of this product and can be feasibly implemented. We hope this information can assist in preserving the *hoshigaki* process for posterity.

APPENDIX A: FARMERS MARKET GUIDE

| | |
|--|--|
| <p>Foothill FM Association</p> <p><i>Contact Person: Christina Abuelo</i> Phone: 530.823.6183 PO Box 3343 Auburn, CA 95604</p> | <p>Tuesdays 9am-1pm, June 1- Sept 28 <i>Roseville Square Shopping Center</i></p> <p>Wednesdays 8am-11am, Aug 4- Sept 1 <i>Downtown Forestville</i></p> <p>Wednesdays 11am-1pm, June 16- Jan 12 <i>Auburn – DeWitt Center</i></p> <p>Wednesdays 4pm-7pm, June 2- Oct 20 <i>Colfax – Main Street</i></p> <p>Thursdays 8am-1pm, May 27- Oct 28 <i>Tahoe City – Hwy 38 @ Watermelon Patch</i></p> <p>Thursdays 8am-noon, June 3- Jan 13 <i>Granite Bay Village Shopping Ctr – Auburn/Folsom Road & Douglas Blvd</i></p> <p>Thursdays 5:30pm-8pm, July 8- Aug 28 <i>Lincoln – Beerman’s Plaza</i></p> <p>Fridays 7:30am-10:30am, July 23- Aug 27 <i>Roseville – Sun City</i></p> <p>Saturdays 8am-noon, year round <i>Auburn – Old Town</i></p> <p>Saturdays 8am-1pm, June 12- Sept 25 <i>Rocklin – Stanford Ranch Road & Park</i></p> <p>Sundays 9am-1pm, July 4- Sept 5 <i>Homewood – Homewood Mtn Ski Resort</i></p> |
| <p>Berkeley FM</p> <p><i>Contact Person: Penny Leff</i> Phone: 510.548.3333 Address bfm@ecologycenter.org"</p> | <p>Saturdays 10am-3pm <i>Center Street @ M.L. King Jr Way</i></p> <p>Tuesdays 2pm-7pm <i>Derby Street @M.L. King Jr Way</i></p> |

| | |
|--|--|
| <p>Marin County FM</p> <p><i>Contact Person Gail Hayden:</i> Phone: 415.456.3276 Info: 800.897.3276</p> | <p>Thursdays 8am – 1pm <i>Marin Veterans Mem. Auditorium Parking Lot</i></p> <p>Sundays 8am-1pm <i>Marin County Civic Center Parking Lot</i></p> |
| <p>Calistoga FM</p> <p><i>Contact Person: Karen Verzosa</i> Phone: 707.942.0808</p> | <p>Saturdays, June-September <i>1546 Lincoln Avenue</i></p> |
| <p>Healdsburg FM</p> <p><i>Contact person: Renee Kiff</i> Phone: 707.473.1956</p> | <p>Saturdays 9 am – 12pm <i>North and Vine Streets</i></p> <p>Tuesdays 4 pm - 6:30 pm <i>Matheson Street on the Plaza</i></p> |
| <p>Sebastopol</p> <p><i>Contact person: Paula Downing</i> Phone: 707.829.3494</p> | <p>Sunday 10 am - 1:30 pm <i>Downtown Plaza</i></p> |
| <p>Ferry Plaza FM</p> <p><i>Contact people:</i> Kim Osborne, Market Administrator Phone: (415) 291-3276 x106 Email: kim@cuesa.org</p> <p>Sharon Lutz, Market Manager Phone: 415.291.3276 x101 Fax 415.291.3275 Sharon@cuesa.org One Ferry Building – Suite 50 San Francisco, CA 94111 info@cuesa.org http://cuesa.org www.ferryplazafarmersmarket.com</p> | <p>Saturdays 8am-2pm Tuesdays 10am-2pm Thursdays 10am-2pm Sundays 10am-2pm</p> <p><i>Ferry Building, Embarcadero & Market Sts</i></p> |
| <p>Davis FM</p> <p><i>Contact person:</i> Phone: 530.756.1695 P.O. Box 1813 Davis, CA 95617</p> | <p>Saturdays 8am-1pm, year round Wednesdays 2pm-6m, Oct – Mar Wednesdays 4:30pm-8:30pm, Apr – Oct</p> <p><i>Central Park – 4th & C Streets</i></p> |

| | |
|---|---|
| <p>Sacramento FM</p> <p><i>Contact Person: Dan Best</i> Phone: (916) 688-0100</p> | <p>Saturdays 8am-noon, year round <i>Sunrise Mall – Sunrise Blvd, behind Sears Auto</i></p> <p>Saturdays 8am-noon, year round <i>Country Club Plaza – Watt & El Camino Sts</i></p> <p>Sundays 8am-noon <i>State Parking Lot - 8th&W Sts, under freeway</i></p> <p>Tuesdays 9am-noon, May – Oct 31st <i>Cal Expo - Lot E on Ethan Way</i></p> <p>Tuesdays 9:30am-1:30pm <i>Roosevelt Park - 9th & P Streets</i></p> <p>Wednesdays 10am-2pm, May – Nov <i>Chavez Plaza - 10th & J Streets</i></p> <p>Thursdays 8am-11:30am <i>Florin Mall - Florin Road Parking Lot</i></p> <p>Thursdays 10am-2pm, May – Oct 31st <i>Downtown Plaza – 4th & L Streets</i></p> |
| <p>Health and Safety Contact Information</p> <p><i>Agricultural Developments</i> Phone: (707) 253-4357 <i>Health Department for processing</i> Phone: (707) 253-4471</p> | <p><i>Calibrate weighing scales</i> Phone: (707) 944-8714. <i>Processed food registration</i> Phone: (916) 445-2263</p> |
| <p>CA CERTIFIED FARMER MARKET REGULATION HIGHLIGHTS</p> <p>√ All fresh fruits, nuts, and vegetables sold in containers shall be labeled with the name, address, and ZIP Code of the producer, and a declaration of identity and net quantity of the commodity in the package. <i>Food and Agriculture Code §47000-47026</i></p> <p>√ By becoming a certified producer through the county’s agricultural commissioner, you can sell your product at certified farmer’s markets in that County. <i>California Code of Regulations Title III, Div.3, Ch. 1, Subch.4, Art. 6.5</i></p> | <p>QUICK GUIDE TO FARMER MARKET REGULATIONS</p> <p>FOOD AND AGRICULTURE CODE http://www.cafarmersmarkets.com/legislation/pdfs/FI1044050240.</p> <p>CALIFORNIA CODE OF REGULATIONS http://www.cafarmersmarkets.com/legislation/pdfs/FI1044050524.pdf</p> <p>HEALTH AND SAFETY CODE http://www.cafarmersmarkets.com/legislation/pdfs/FI1044050679.pdf</p> |

APPENDIX B: FARMERS MARKET INTERVIEW PROTOCOL

Do you have growers who sell dried fruit/ dried persimmons?

What is the process for new farmers/sellers who wish to sell at your market?

Do you have restrictions on what can be sold, who can sell, how many booths?

How many/what days of the week are you open?

What is the stand fee (per month or year)?

Do you allow seasonal booths?

Are you familiar with the slow foods movement, arc food?

Do you have any vendors that are affiliated with Slow Food or use Slow Food in their marketing?

Do you think that vendors affiliated with Slow Food have any sort of marketing advantage?

Have you heard of/ familiar with *Hoshigaki*/dried persimmons?

APPENDIX C: FARMERS MARKETS INTERVIEWS

Sebastopol Farmer's market

Interviewer: Michael Paine

Interviewee: Paula Downing

(707) 829-3494

Do you have growers who sell dried fruit/ dried persimmons?

Some dried fruit, but it is all oven dried.

What is the process for new farmers/sellers who wish to sell at your market?

If there is room a new vendor can come try out the market, if they like it and it seems like a good match they can become a member. Paula really wants growers to make money so maintaining the diversity of vendors is very important. There are 35 spots at the most.

Do you have restrictions on what can be sold, who can sell, how many booths?

State law says that the vendor selling them must produce the products being sold. However, this is not the case for dried fruits as they fall in the processed category. Those can be sold by another party or as a collective.

How many/what days of the week are you open?

The Sunday market is open from April through November 10:00-1:30.

What is the stand fee (per month or year)?

There is a \$25.00 yearly membership fee and then a stall rental fee of \$14.00. Stalls are the size of a parking space; some vendors rent two for their display.

Do you allow seasonal booths?

Yes

Are you familiar with the Slow Food movement, Ark foods?

Familiar with Slow Foods, but not with Ark foods.

Do you have any vendors that are affiliated with Slow Food or use Slow Food in their marketing?

Not sure.

Do you think that vendors affiliated with Slow Food have any sort of marketing advantage?

Not sure about any advantage. Paula thought that 50% of patrons from Sebastopol would be familiar with Slow Foods, but only 10% from other parts of the county.

Have you heard of/ familiar with *hoshigaki* /dried persimmons?

No

Healdsburg Farmer's market

Interviewer: Michael Paine

Interviewee: Renee Kiff

(707)431-1956

Do you have growers who sell dried fruit/ dried persimmons?

Yes, a regular vendor at the market is a grower from Tulare County. Between 50% and 75% of his business is dried fruit. He does not dry persimmons.

What is the process for new farmers/sellers who wish to sell at your market?

There has to be a need for the product and the product need to be grown by the vendor.

Do you have restrictions on what can be sold, who can sell, how many booths?

The only space constriction is that the market can only occupy two aisles of a parking lot. At the peak of the summer there are around 50 growers, however at the beginning and end of the season it is closer to 35. The Tuesday market usually maintains around 15 growers.

How many/what days of the week are you open?

The Saturday market starts the 1st Saturday in May and runs to the last Saturday in November. The Tuesday market runs from the 1st Tuesday in June until daylight savings kicks in.

What is the stand fee (per month or year)?

The stand fee is 10% of the gross for the day, but not to exceed \$30.00.

Do you allow seasonal booths?

Yes, if the need for the product is there.

Are you familiar with the Slow Food movement, Ark foods?

Yes, both. There are three women in Healdsburg who are very involved in Slow Food and they are at the market every Saturday.

Do you have any vendors that are affiliated with Slow Food or use Slow Food in their marketing?

Yes, Tierra Vegetables out of Windsor sell a chipotle pepper that has been nominated as an Ark food

Do you think that vendors affiliated with Slow Food have any sort of marketing advantage?

No. Perhaps only 5% of people who visit the market are familiar with Slow Food.

Have you heard of/ familiar with *hoshigaki*/dried persimmons?

No.

Calistoga Farmer's market

Interviewer: Renata Blumberg

Interviewee: Karen Verzosa

Do you have growers who sell dried fruit/ dried persimmons?

Some dried.

What is the process for new farmers/sellers who wish to sell at your market?

You need the state certificates from health and safety. Go through Agricultural Development (707) 253-4357. Health Department for processing (707) 253-4471

Have to get weighing scales that are calibrated (707) 944-8714.

Processed food registration (916) 445-2263

Do you have restrictions on what can be sold, who can sell, how many booths?

You just need the certificates

How many and what days of the week are you open?

Saturdays

5. What is the stand fee (per month or year)?

The member fee is \$20 per season.

Per Saturday, the member fee is 15\$

The non-member fee is 20\$/day

6. Do you allow seasonal booths?

This is a seasonal market

7. Are you familiar with the Slow Food movement, Ark food?

No

8. Do you have any vendors that are affiliated with Slow Food or use Slow Food in their marketing?

No

9. Do you think that vendors affiliated with Slow Food have any sort of marketing advantage?

No

10. Have you heard of/ familiar with *hoshigaki*/dried persimmons?

No

Sacramento Certified Farmers' Markets

Interviewer: Nathan Cole

Interviewee: Dan Best

Do you have growers who sell dried fruit/ dried persimmons?

No dried persimmons currently being sold. But manager knew exactly what they were. In the past some people have sold them. They do sell dried fruit at the markets but manager did not know prices. Imagined they vary with the type of fruit.

What is the process for new farmers/sellers who wish to sell at your market?

Must be actual grower to sell at any certified farmers' markets in California.

Do you have restrictions on what can be sold, who can sell, how many booths?

Space availability is currently the biggest restriction. One grower qualifies for one booth, if cooperative may qualify for more booths. Bakery goods, ocean fish ok. No arts/crafts as part of FM.

How many/what days of the week are you open?

There are nine markets in Sacramento – refer to FM contact sheet for times and days.

What is the stand fee (per month or year)?

\$17 per visit.

Do you allow seasonal booths?

Yes.

Are you familiar with the slow foods movement/Ark food?

No answer

Do you have any vendors that are affiliated with Slow Food or use Slow Food in their marketing?

No answer

Do you think that vendors affiliated with Slow Food have any sort of marketing advantage?

No answer

Have you heard of/ familiar with *hoshigaki*/dried persimmons?

No answer

San Francisco Ferry Plaza Farmers' Markets

Interviewer: Jennifer Campos

Interviewee: Sharon Lutz

Do you have growers who sell dried fruit/ dried persimmons?

Yes, some people sell them here

What is the process for new farmers/sellers who wish to sell at your market?

Will not disclose.

Do you have restrictions on what can be sold, who can sell, how many booths?

Must be accepted to our market, follow CA Certified Farmer's market Rules, must grow and dry your own fruit to sell there

How many/what days of the week are you open?

Saturdays - 8:00 am - 2:00 pm

Tuesdays - 10:00 am - 2:00 pm

Thursdays - 10:00 am - 2:00 pm

Sunday Garden Market - 10:00am - 2:00pm

What is the stand fee (per month or year)?

Will not disclose

Do you allow seasonal booths?

Yes

Are you familiar with the Slow Food movement, Ark food?

Yes, very familiar. CUESA (Center for Urban Education about Sustainable Agriculture), (they organization the Ferry Plaza Farmer's market) is a member of slow food. Alice Waters is on their board of directors. She said that she knows that some of their shoppers know of or are active in the Slow Food organization.

Do you have any vendors that are affiliated with Slow Food or use Slow Food in their marketing?

Not that she knows of.

Do you think that vendors affiliated with Slow Food have any sort of marketing advantage?

No answer

Marin County Farmers' Markets

Interviewer: Ben Lewis

Interviewee: Penny Leff

Do you have growers who sell dried fruit/ dried persimmons?

Yes, Jim Russell.

What is the process for new farmers/sellers who wish to sell at your market?

Application/permits, waiting list

Do you have restrictions on what can be sold, who can sell, how many booths?

Yes, based on product mix, org vs non-org, locality, seniority, etc (formula laid out in rules and regulations).

How many/what days of the week are you open?

9 markets in the Bay Area

What is the stand fee (per month or year)?

\$30-\$35 per stall, per month.

Do you allow seasonal booths?

Yes.

Are you familiar with the Slow Food movement, Ark food?

Yes.

Do you have any vendors that are affiliated with Slow Food or use Slow Food in their marketing?

Yes.

Do you think that vendors affiliated with Slow Food have any sort of marketing advantage?

Yes, people want to eat healthy. Persimmons have a high glycemic index = give energy over time per calorie. Good for diabetics – only fruit that diabetics can eat.

Have you heard of/ familiar with *hoshigaki*/dried persimmons?

Yes, did not remember what they were called but had tasted dried persimmons from Jim Russell and thought they were great.

APPENDIX D: GROWER INTERVIEW PROTOCOL

Interviewers:

Interviewee:

Date:

1) Cultural assessment

- a) What is your knowledge of the history of *hoshigaki*?
- b) How important is it to you that you/your family continue the practice of *hoshigaki*?

Very
important

Moderate

Not
important

- c) When and why did you/your family start *hoshigaki*?
- d) How did you (your family) learn *hoshigaki*?
- e) What is the most difficult hurdle you face in continuing to dry persimmons?
 - i) Labor?
 - ii) Rate of Return?
 - iii) Delivery?
 - iv) Other?

2) Process

- a) What is the shelf life of a dried persimmon?
- b) What are your post harvest processing issues?
- c) Are the dried persimmons stored on farm?
- d) How is the quality of the product reflected by the amount of work put into the process?
- e) What varieties of persimmon do you dry?

3) Cost and Labor questions

- a) How many pounds of persimmons do you process each season?

- i) Pounds Fresh?
- ii) Lbs. Dried?
- b) How many people are doing the labor?
- c) Who are they (family, hired)?

| | # people | # labor hours/rack? | Other costs |
|-----------------------------|----------|---------------------|-------------|
| Stringing | | | |
| Setting up and moving racks | | | |
| Massaging | | | |
| Packaging | | | |
| Marketing | | | |

- d) What are other on-farm/off-farm occupiers of your time?
 - i) On farm?
 - ii) Off farm?

Marketing questions

Where do you market your product?

What percentage do you sell at each market outlet?

What is the type of transport you use and what are transportation costs?

| Type: | Y/N | What % in this market? | Transport method (Location/ distance) | Cost? |
|-------------------------------|-----|------------------------|--|-------|
| Farmer Markets | | | | |
| Retailers (eg. Berkeley Bowl) | | | | |
| Wholesale | | | | |
| Traditional Consumers | | | | |
| Newspaper ads | | | | |
| Others | | | | |

- 4) How do you transport your dried persimmons?
- 5) Are you organic, or third party certified?
 - a) Would you be interested in becoming so?
- 6) What packaging and presentation do you use for your product?

APPENDIX E: NUTRITIONAL INFORMATION

Nutritional and Amino Acid Content of dried Hachiya Persimmons

| Nutrient | Units | per 100 grams |
|--------------------------------|--------------|----------------------|
| Calories | kcal | 274 |
| Protein | g | 1.38 |
| Total fat | g | 0.59 |
| Fiber, total dietary | g | 14.5 |
| Minerals | | |
| Calcium, Ca | mg | 25 |
| Iron, Fe | mg | 0.74 |
| Magnesium, Mg | mg | 31 |
| Phosphorus, P | mg | 81 |
| Potassium, K | mg | 802 |
| Sodium, Na | mg | 2 |
| Zinc, Zn | mg | 0.42 |
| Copper, Cu | mg | 0.442 |
| Manganese, Mn | mg | 1.39 |
| Vitamins | | |
| Vitamin C, total ascorbic acid | mg | 0 |
| Riboflavin | mg | 0.029 |
| Niacin | mg | 0.18 |
| Vitamin A, IU | IU | 767 |

(USDA National Nutrient Database for Standard Reference, 2004)

| Amino acids | | |
|---------------------|-----|------|
| Tryptophan | g | 0.02 |
| Threonine | g | 0.07 |
| Isoleucine | g | 0.06 |
| Leucine | g | 0.10 |
| Lysine | g | 0.08 |
| Methionine | g | 0.01 |
| Cystine | g | 0.03 |
| Phenylalanine | g | 0.06 |
| Tyrosine | g | 0.04 |
| Valine | g | 0.07 |
| Arginine | g | 0.06 |
| Histidine | g | 0.03 |
| Alanine | g | 0.07 |
| Aspartic acid | g | 0.14 |
| Glutamic acid | g | 0.18 |
| Glycine | g | 0.06 |
| Proline | g | 0.05 |
| Serine | g | 0.05 |
| Other | | |
| Carotene, beta | mcg | 374 |
| Carotene, alpha | mcg | 18 |
| Cryptoxanthin, beta | mcg | 156 |

APPENDIX F: LITERATURE CITED

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