



An AMBIT Solutions White Paper

The Death of Agriculture in Alaska: *Facilitating the Resurrection*

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Introduction and salutation

This paper is not about the creation of discussion points on whether or not agriculture in Alaska is in dire straights; it is a statement of fact on the current situation and the only clear path that seems logical if we want to continue to have agriculture in the state. Let me state that this is not an attack on any individual or organization mentioned in this paper or not. This paper makes four salient points:

- Alaska's dairy industry is collapsing and will severely impact all other Ag sectors
- Funding for agriculture projects is not be properly targeted
- Alaska and Alaskan's are at risk due to food security issues
- Alaskan products can not compete with low cost imports from the Lower 48, but they do not have to if properly marketed

Problem Statements

“The Death of Agriculture in Alaska” may seem too strong a statement, but the further that I dig into this subject the more convinced I become that agriculture in Alaska is in such serious decline that within the next few years there will be nothing left but a few scattered producers who are growing and raising product for the vegetable market, directly for themselves, or for the pet market. Support for the agriculture industry has been nascent and haphazard in a process that I call “Distributed Failure”. This means that the small amount of funding that has been made available to the industry has been parceled out in such small pieces to as many recipients as possible, with very little overall impact in any sector for any producer.

I started out in the dairy industry in 1975 working on a rural dairy farm. We milked 200 head of cattle and raised 1,200 head of beef. Even at this time things were changing in the industry as this was considered a small operation compared to the larger corporate farms that were driving the dairy industry. It's strange to look back and compare that farm with the dairy producers of today in Alaska. None of the dairy producers come close to that size of an operation nor can they compete with the large producers located in Washington State. The factors that go into this problem are many; the decline of the number of dairy cattle in this state, the cost of fuel, the cost of feed, the cost and value of Alaska agriculture land, and the cost of labor.

Who killed the Alaskan dairy farmers?

The last of the dairy farmers in South Central Alaska are on the brink of closing their doors, selling off their cattle, and exiting the state, leaving most of agriculture in Alaska in a catastrophic state. This series of events is catapulting us to a point where Alaska's agricultural industry will no longer have the critical mass to resurrect itself. If we, as Alaskans allow this downward spiraling trend to continue, in just a few short years there will be nothing left but a handful of growers for the vegetable and pet food markets.

One of the primary reasons for this deleterious state is that Alaska lacks a unified vision of the complexly, matrixed, interdependent, and relational system that exists in what is essentially an isolated agricultural community. Without this unified vision intelligently applied, (with a criteria of maximum positive impact on as much of the agricultural matrix as possible,) Alaska's agricultural industry cannot survive. Validation of this detrimental chain reaction can be found when we examine a few basic facts about the foundation of our agricultural endeavors: The dairy industry-

- The Alaskan dairy industry has a direct impact on the hay and other feed crop farmers, fertilizer manufacturing and distribution companies, the slaughterhouse industry, two different bottling and distribution enterprises, segments of the transport industry, and various local providers of farm equipment in Alaska, and the perceived value of various institutions such as the University of Alaska's agricultural division, the cooperative extension service, the plant material center, and the State Division of Agriculture;
- Alaska's expensive agricultural land, fuel, feed, labor, etc, are much higher than those of competing lower 48 farms;
- Even if all of Alaska's dairies were to combine, they would not be able to achieve the economies of scale that allow them to compete in the same arena with the large corporate dairies in the Lower 48, or government subsidized dairies like those found in Washington State;
- Each Alaskan dairy is restricted to a single creamery, which removes any competition for their milk; and
- Alaska's creameries (one in South Central and one in the Interior) are able to brand their products as Alaskan made, without regard to the percentage of milk that actually comes from Alaska. Thus, they have no vested interest in the dairy industry's survival in Alaska.

An outcome of our present discussion is to help illustrate the complexity and vulnerability of Alaska's unique agricultural industry, as well as to propose a simple but far reaching plan that will curtail the downward spiral our agriculture industry is experiencing; while offering a means of obtaining stability and profitability throughout the industry. So to answer the original question "who killed the Alaskan dairy farmers": Out of state competition and unfocused local resource management has all but killed our dairy industry.

Case In Point

The following example is offered as a clear illustration of how distributed failure wreaks havoc on our agricultural industry even when the process was well intentioned:

USDA \$650,000.00 Grant for Dairy Industry in Alaska

This money, (the original amount was over a million) was given directly to the State of Alaska's dairy industry, through the efforts of Senator Ted Stevens, for the purpose of helping Alaska's floundering dairies. As often happens with such funds, it was quickly diverted onto a path of distributed failure through the following steps:

1. Money is channeled to the USDA office in Alaska
2. USDA Alaskan office removes cost share off the top for “administrative fees”
3. USDA office in Alaska decides to distribute remaining funds through a scored grant application process that unknowingly no farmer/producer can meet
4. USDA office writes grant for helping dairy farmers in Alaska, but for some inexplicable reason, includes a clause in the grant requiring applicants to have matching funds
5. No dairy farmer in Alaska has such funds available to them

Table compares three different applicants and the effect their proposal will have on the overall agricultural community

Value added Proposal	Bottling Proposal	Ice Cream Proposal
<p>Artisan Cheese manufacturing in Alaska</p> <ul style="list-style-type: none"> • Support 150 head of cattle at \$26 pr hundred weight, with plans to support more cows as market demand grew • Follows value added concept, which business analysis indicates is only feasible way for Alaskan dairies to stay in business • Allowed last Dairy family in Valley to continue operating through next generation • Made dairy farmer 100% accountable; Farmer willing to put everything on the line for this to work • Opened local and out-of-state markets • Increased demand for feed, fertilizer, equipment, etc, as the project grew • Did not compete with local creamery 	<p>Water Bottling Plant turns to Milk</p> <ul style="list-style-type: none"> • Applicant is friend of USDA grant author • Applicant was never in the dairy industry • Applicant carries no responsibility to dairy industry • Applicant will not guarantee purchase years, volumes or pricing for dairy farmer, creating unacceptably high risk for dairy farmers who could lose their position with only creamery in area • Even at \$28 per 100 weight, no dairy farmer will sell to applicant because of fear of punitive actions from creamery business • Consequently no cows supported, and no increases in grain, fertilizer, equipment, etc sales. 	<p>Gourmet Ice Cream Production</p> <ul style="list-style-type: none"> • Supports 5 – 7 head of cattle • Follows value added concept, which business analysis indicates is only feasible way for Alaskan dairies to stay in business • Could have partnered with Artisan Cheese applicants to receive base product and share equipment • Applicants list of proposed equipment and location does not match reality of industry

6. Grant fund was carved up for distribution of smaller sums to multiple applicants, causing the effect of no applicant having enough capital to succeed
7. Proposal with best chance of success and highest positive impact on overall agriculture community is denied because of lack of matching funds, and a request for the entire amount of grant to assure success, rather than a portion as grant author envisioned
8. Bottling plan wins but offers no buying guarantees so cannot get dairies to sell milk. Applicant is talking with one dairy man who is already planning on shutting down, in hopes of getting him to sell milk to him for an indeterminate amount of time. Outcome of these negotiations is to be determined. Chance of continued success is small.
9. Overall impact of bottling proposal on states dairy industry negligible to negative

10. Ice Cream proposal wins part of grant money
11. If applicant can buy the right facility and equipment, open the right markets, and support the small amount of cattle required for production, with the small amount of money he receives, he may have a chance of success utilizing ingredients from out of state.
12. Ice Cream proposal has very little if any impact on overall dairy industry and general agriculture in Alaska
13. The grants original intent is lost

When comparing the proposals, it is evident that no thought was given to the overall impact each proposal offered to the agricultural industry as a whole, or to whether or not the funds being divided up like they were would have the negative consequence of increasing the chance of failure from undercapitalization for those who were awarded the monies. And finally, no thought was given to the consequences of our dairy farmers facing the realities that come with having access to only a single creamery, and the pricing consequences that that creamery can levy if a dairy farmer chooses to sell a portion of his product to a high risk startup that could be seen as a competing creamery.

The local USDA office and the Alaska Department of Agriculture intentions are to grow Alaska agriculture and be as fair as possible in the distribution of funding that they receive, but the effect in many cases dilutes the potential impact of the funding and distributes it to organizations that have no impact on the growth of agriculture. In fact the result of this distribution method actually harms the industry as the initial targets of the grant receive no funding either directly or indirectly. Without the redirection of this funding or the acquisition of additional monies, the basis of the agricultural industry in Alaska, the dairy industry, will almost surely disappear.

In the aftermath of diluting the grants original intentions, and the winning applicants either not being able to buy enough volume to support a farm, or not being willing to guarantee purchasing prices, volumes, and contract times, the only dairy farmer left in the Mat-Su Valley, who is willing to milk his own cows rather than requiring someone else to milk them for him, and who has children that want to continue building Alaska's dairy industry into the next generation, is ready to close up shop. This family is not alone. The majority of dairy farmers in the Mat-Su Valley are already trying to sell off their inventory and planning their exit strategies.

Interior Alaska is no better off. As a result of the only creamery available to them, mandating that they sell all of their liquid milk to them, or lose any chance of ever doing business with that creamery, and of offering a price that is below the cost of sustaining the farm, two of the four Interior farms have already gone under, and the others are struggling to break even.

This leaves Alaska's dairy industry and all the other industries that dairy supports, at death's door.

Statements of Evidence

To help understand the disadvantages our liquid milk dairy industry faces when forced to compete with the lower 48, we turn to that which was outlined in a report from Milian P. Shipka, PhD, of the Cooperative Extension Service, to Alaska Department of Natural Resources Commissioner Mike Menge:

“Alaska dairy farms are not like most profitable dairy farms in the lower 48. Size is a major difference. Most relatively new confinement dairy farms in the lower 48 contain more cows than are located in the entire State of Alaska. Size of dairy farms has increased to achieve economies of scale not available on smaller farms.

Alaska dairy farms lack other services vital to the operation of a profitable business.

Alaska dairy farms lack options for income. Each of our dairy producers has only a single creamery to which they can sell their milk. Well managed dairy farms in the lower 48 often have different creameries vying for the opportunity to market their milk and cases of signing bonuses for year long or two year long contracts have been noted in recent reports on NPR. Even beyond milk sales, income by sales of cull cattle and bull calves is limited or in some cases non-existent.

To recap important points concerning the Alaska dairy producer:

- *Milk production in Alaska costs more than milk production in the lower 48.*
- *Milk production per cow is considerably lower in Alaska compared to many areas of the lower 48.*
- *Hay quality in Alaska is below the quality of hay fed to milk cows in confinement dairy operation in the lower 48.*
- *Choice of feeds and types of feed available are severely limited in Alaska compared to the lower 48.*
- *Vital support services such as veterinary, other animal care specialists and artificial insemination technical people are lacking or non-existent in Alaska.*
- *Alaska dairy farms lack options for income enhancement.*
- *Debt load on many Alaska dairy farms appears to be higher than can be serviced by dairy cows and farm business organization does not allow for shared debt allocation.*
- *Alaska dairy producers may not possess critical mass for survival as an industry.”*

Dairies and Creameries

As informative as Dr. Shipka's report is, one very important fact is missing: while economies of scale have reduced costs for dairies in Washington State, the costs of Alaskan dairy producers have steadily increased by over 40 percent in the last 10 yrs. The increase in the price that dairies are paid for their milk on average has increased less than 1.5 percent over the same period and in many cases has fallen. For example for many dairy producers in the state their ability to sell their product is limited to only 1 or 2 buyers either Matanuska maid or Northern Lights Dairy. Matanuska Maid located in Anchorage and Northern Lights Dairy located in Delta Junction.

Currently Northern Lights Dairy tries to keep as much Alaskan grown products in their final output as possible, but they have had to purchase additional products from Matanuska Maid in order to fulfill their customer's demands. Much of this product is sourced out of state, with the majority coming from Washington State. The cost of this product including shipping drives the cost of their end product above the level of consumer acceptance. In order for Northern Lights to keep their product viably priced against out of state competition they must demand lower purchase prices for the milk that they buy in state.

Currently they are paying 19\$/hundred weight while the cost of production for the Alaskan dairy farm is 21\$/hundred weight. Which of course means the loss of 2\$ for every hundred pounds of milk sold to Northern Lights. In order for Northern Lights to get enough product from in state producers, they have demanded that the dairies they buy from sell them 100 percent of their production or they will refuse to buy any of it. In the last year, this scenario has driven two dairies out of business with others on the brink of financial ruin.

Meanwhile, the mega farms in Washington State are heavily subsidized at both the state and federal level. They are also the most productive dairy farms per cow in the country. Access to high quality feed the moderate climate and lower cost labor lead to the ability of Washington dairy producers to sell product to Alaska. That cost less than locally grown product. These economics were highlighted in a report to the dept of agriculture Created by E. Bruce Godfrey in April 2005.

MILK PRODUCTION IN ALASKA
A report to the
ALASKA DIVISION OF AGRICULTURE
(Concerning Economic Issues Associated with Milk Production in Alaska)
By
E. BRUCE GODFREY
ECONOMICS DEPARTMENT
UTAH STATE UNIVERSITY
LOGAN, UTAH 84322-3530
April 2005

FACTORS AFFECTING DAIRIES IN ALASKA

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Milk Production

One of the key variables that affect the profitability of any dairy operation is the productivity of the cows that are milked. The most common measure of productivity is pounds of milk produced per cow. Data from the Agricultural Statistics Service show that the production per cow is lower in Alaska than most dairy production regions in the "lower 48" (figure 3.)

Washington has had the distinction of having the highest production per cow among the United States for several years. Of the states shown, only Wyoming has production levels that are comparable to Alaska. It also should be noted that production per cow has risen over time in most states with Alaska being an exception to this trend. It is not known why milk cow productivity has not increased in Alaska, but the stable trend would suggest that milk production in Alaska is at a comparative disadvantage to other states from a strictly production point of view. It also should be noted that the limited experience (number of years they have been producing milk in Alaska and/or elsewhere) of some producers (see Appendix A) may also have an impact on the productivity of milk production in Alaska.

P.10

Milk Prices

One of the most common complaints expressed in the surveys received from Alaska dairymen was that the price paid for milk in Alaska had not "changed in 20 years." Some indication of the difference in milk prices paid in Alaska compared to other areas of the United States are shown in Figures 4 and 5. These data clearly show that milk prices in Alaska have been significantly higher and more stable than prices in the "lower 48." As a result, the price risk faced by Alaska dairymen is less.

The data above do not address the issue the relative prices over time. In an effort to address this issue the cost of shipping milk from Washington to Alaska was derived. Conversations with personnel at the Mat Maid plant indicated that the cost of shipping milk from Washington that is purchased to supplement the amount produced in Alaska was about \$6.50 per hundred. The amount (\$6.50 per cwt) was added to the mailbox price and the class I price for milk in the PNW order. The results are shown in Figure 6. These data indicate the price paid to Alaskan producers who sold milk to Mat Maid was higher during most of 2003 than what was paid for milk shipped from Washington. However, during most of 2004, the prices have been lower. During 2003 and 2004 the average price paid to producers selling to Mat Maid was \$20.86. This compares to the average price of \$19.52 for milk priced at the mailbox price (average net farm price) received by producers in the PNW. This represents a premium of more than \$1.30 per cwt compared to PNW producers if milk delivered to Alaska as based on the price received by PNW producers.

The price for class I (fluid consumption only) based milk shipped to Alaska averaged \$21.60 during 2003-2004, or a discount of more than \$.70 per cwt compared to the prices paid to Alaskan producers. These data indicate that the prices that Alaska producers who sell to Mat Maid have been stable compared to producers in the PNW and have likely been higher than the cost of obtaining milk from firms in Washington. Milk prices represent the primary revenue factor affecting the profitability of dairy operations in Alaska, but another major factor is the cost of producing milk.

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Sale of Cull Animals and Calves

The revenue received from the sale of bull calves is generally zero, because there is not a market for these animals. One producer referred to them as "bear bait." As a result, a relatively important source of income for producers in the "lower 48" is not available to producers in Alaska. The market for the sale of cull cows is also limited. These animals can be sold to existing slaughtering facilities, but the time that they can/will be accepted may be limited, and there is limited market competition for these sales.

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Conclusions

If it was not obvious before, one conclusion must be emphasized- every dairy operation in Alaska is different. As a result, changes, such as the price of milks, feed, or other variables, will affect each firm differently. Some firms can withstand changes that reduce profitability much easier than can other firms. Every firm would be positively affected by an increase in the price paid for milk or reduction in the cost of inputs. However, efforts to reduce the price of purchased inputs or an increase in the price paid for milk at the farm level will be affected by forces beyond the control of firms in Alaska. For instance, the cost of inputs purchased from sources in Canada or the "lower 48" will be dictated by market forces outside of Alaska. As a result, the primary way dairy operators in other states can increase net revenues is to efficiently use resources under their control. This means that evaluations of alternative actions must be given high priority. This would include possible actions, such as increasing milk production per cow, but it is likely that actions that would reduce the cost of milk production would have the greatest promise for some of the producers surveyed.

Leveraging this lower pricing and higher volume availability from the Lower 48, Matanuska Maid has chosen a different path than that of Northern Lights Dairy. They purchase the bulk of the dairy product needed to supply their customers, from Washington State and other outside sources. They must do this to remain competitive with large scale suppliers that ship milk to Alaska from lower cost providers. As stated

above, 21\$/hundred weight is just above the break even point for Alaskan producers, while producers in the Lower 48 can create the same milk for between 13-15\$/hundred weight. Matanuska Maid has succeeded in competing with the out of state producers by branding its product with a symbolism previously reserved for an all Alaskan product. Regardless of where their raw product comes from, Matanuska Maid has been able to grow and prosper by bottling in state, and leaving most Alaskan residents to believe that their products are Alaskan grown, thus taking advantage of the average Alaskan's urge to support locally made products.

Matanuska Maid has referenced that they have been under state control and ownership for almost 25 years and plans are to take the company back to the private sector. As this happens it can be predicted that even less of the content of their product will be Alaskan grown. In a sense, Matanuska Maid is less of a dairy/creamery and is more a bottling operation. They do not see this as a problem and still consider themselves as part of the dairy industry in Alaska as reflected in their 2005 Annual Report.

*Introduction- About Matanuska Maid Dairy
Matanuska Maid
A Colony, A Legacy, A Future
Matanuska Maid Dairy
2005 Annual Report*

Twenty years ago, the prospects for Alaska's agriculture looked bleak. With the Point McKenzie/Delta Junction dairy farm experiences having soured and Matanuska Maid in bankruptcy, it looked to everyone except die-hard optimists that Alaska crop and dairy farming couldn't make it on its own and achieve basic self sufficiency. Today, agriculture is more diverse than ever. Despite continued challenges, including the loss of important farms and farm lands, activity in Alaska agriculture contributed more than \$50 million last year to the health and financial stability of the state. Matanuska Maid is perhaps the most tangible evidence of that state of health and high-value growth.

There are only three dairy farms left in the Point McKenzie area. On one of these farms the owner has terminal cancer and will soon be going out of business. The cost of acquisition of this farm by another producer is so prohibitive that it will likely no longer be a dairy. Another farm is run by an elderly couple who has no children and are planning to shut the farm down and sell of the herd to fund their retirement. The last farm, which is also the largest, is saddled with such an extreme debt load, because it cannot sell its milk at prices that will sustain the farm, that if something isn't done soon they will also cease to exist. That would leave the entire state with only 5 dairies still producing bulk quantities of milk, and their future does not look much better.

Impacts to other Agriculture Producers

The effects of the loss of these producers will be significant and far reaching. Each dairy on average consumes the product output of three Alaskan grain farmers and three Alaskan hay farmers. In other words if those three dairy farms are gone it could lead to the demise of 18 other farms.

ALASKA CEREAL GRAIN CROP PROFILE

Revised February 2006

www.alaskapestmanagement.com/cereal_grains.html

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Summary

Cereal grain production is a very important component of the Alaskan Agricultural Industry. Cereal feed grains are utilized by the Alaskan dairy industry, swine producers, beef producers, sheep and goat owners, and the recreational livestock owners as well as those families raising limited numbers of animals for their own consumption (subsistence). Also the straw from these crops provide valuable bedding for dog teams, statewide.

Consistently raising quality feed grains is and will remain an economic challenge in Alaska. The unique climatic and pest conditions, coupled with the current economic condition (attitude) of the state limit the development and adaptation of new technologies for agriculture. With the current limitation on University research and extension, as well as market development through the Division of Agriculture, producers must essentially attempt to adopt the needed technology themselves. This can be a slow and painful process. However, Alaskan cereal grain producers continue the quest to improve production economies and marketing efficiencies while also striving to protect the environmental quality of Alaska.

This impact on feed grain growers would constrict the farming economy and those few dairy producers left would be paying higher prices for the products that they need to feed their cattle

Mount McKinley Meats and Sausage

The impacts to Alaskan agriculture from the demise of these dairy farms would not end with grain and hay farmers. Mt. McKinley Meat and Sausage annually butchers the cull from the dairy herds amounting to approx. 20- 25 percent of their throughput. The slaughter house is already losing money, due to the restrictions on direct sales to the public, at approximately 50-100K/yr. The loss of the dairy cull animals would ensure the doom of McKinley Meat and Sausage.

If McKinley Meat and Sausage no longer exists, the beef cattle farms will no longer have a kill site for their animals. Many of those producers will sell off or have butchered their

entire herds prior to McKinley Meats and Sausage's demise ending the beef industry in Alaska. This would also be the case for the pork producers who make up approximately 40 percent of McKinley Meat and Sausage's throughput. Again, if these farms go under the grain farmers who supply them will go under as well. This will inhibit entry into the market of small producers as outlined in the May 2006 report by Larry Devilbiss, Director of the division of Agriculture.

*THE AGRICULTURAL INDUSTRY IN ALASKA;
A Changing and Growing Industry-
Identification of Issues and Challenges
Prepared For:
Alaska Agricultural Industry Leadership Group
And
Department of Natural Resources
Division of Agriculture
Larry DeVilbiss, Director May 2006*

This report was prepared by the University of Alaska Fairbanks (UAF) Cooperative Extension Service with assistance from the UAF School of Natural Resources and Agricultural Sciences and Agricultural and Forestry Experiment Station and participation from the University of Alaska Office of the Vice President for Research.

P.2-3

Alaska's agricultural industry stagnated in the 1950s when transportation into the Territory made it more efficient to import food products, both fresh and processed. By the time interest in agriculture in Alaska was renewed in the late 1970s, the United States was well into the post-industrial, non-expansionist period, and its policy did not favor increasing agricultural lands in production anywhere in the United States. As a result, virtually no federal support was available for expanding the agricultural industry in Alaska.

However, grass roots support for expansion of the agricultural industry in Alaska did begin anew in the 1970s. The State's economy was expanding because of increasing oil revenues. The non-indigenous component of the population had migrated from the contiguous states where agriculture signified a solid economic base and epitomized the frontier spirit. However, at the decision-making level, there was little understanding of the industry. Certainly, nostalgia for the pastoral tradition existed, but the U.S. program of commodity-based agriculture that was being promoted was not recognized or understood as a low-margin, heavily subsidized industry that develops over a long period of time. During the period when plans were being developed for agricultural expansion in Alaska, U.S. commodity agriculture was enjoying record prices, and farmers were being encouraged (by the USDA) to plant "fence-row to fence-row". The administration in Alaska in the mid-1970s and early 1980s provided support for expansion of this commodity-based agricultural industry in the form of land sales, loan programs, and partial infrastructure. Following administrations did not see the need to continue this level of support,

particularly with the knowledge that commodity market prices were dropping.

P.5

The Changing Face of Agriculture in Alaska

Agriculture has never been a major factor in the territory's or States economy. Nonetheless, it has been a stable industry that has provided Alaskans with fresh meat and produce. Today, Alaska agriculture probably supplies less than 5% of the State's, food needs. All traditional agricultural products constitute less than 1% of the State's revenues from resources industries. Its processing infrastructure is under-utilized for red meat and milk, and is minimal for vegetables. The difficulty of wholesale market access, including infrastructure for bulk products within the State, further hinders producers.

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Industry Opportunities and Constraints

In general, opportunities are defined by the market and constrains are most often a function of the industry – its limitations and its costs. For example, the success of greenhouse operations in producing plants and flowers has demonstrated the importance of both quality and efficiency of production. Consumers in Alaska will pay more for Alaska Grown if it is a quality product. Changes in customer profiles, needs, and purchasing power are the market dynamics within which opportunities for agricultural development in Alaska are created. Although there are two categories of customers- export and in-state – only the latter is presently creating opportunities for producers.

P.9-10

Production and Marketing

Alaska's agricultural industry suffers partly from its inability to effectively market agricultural products due to high transportation and energy costs, a lack of processing facilities for raw products, and a reliance on direct marketing – all leading to, or caused by, difficulty entering the traditional wholesale/retail market chain. The food wholesale/retail chain in Alaska has undergone major changes in the last decade, including the sale or closure of most Alaskan-owned supermarkets. Large retailers, including Safeway, Kroger, and Wal-Mart, are dominating the market. Direct marketing to these chains is difficult because they use their own distribution centers to supply products available throughout the year. Alaskan growers only supply seasonally.

Finding ways to address these fundamental weaknesses attributable to infrastructure problems will challenge Alaskans. Some producers are finding ways to enter the retail market other than through the supermarkets, but marketing is a substantial challenge for individual small producers. Even markets for feed and hay are affected by the influx of large retailers (in particular, Wal-Mart, which has a very wide selection of

feeds for all types of animals). The relatively high price of hay in Alaska has provided trucking companies with a strong incentive to import cheaper hay from outside. Alaskan farmers need to study existing agricultural infrastructure to identify strengths, under-utilized capacity, and limited resources that could be enhanced and augmented by additional investment.

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Opportunities and Constraints - Horticulture

Growth opportunities for vegetable growers are most promising in the direct market sector and include farmers' markets, organic production, and community-supported agriculture. Wholesale opportunities to supermarket retailers are constrained by the seasonality of production, lack of added value processing, and increasing costs that prevent competitive pricing.

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Opportunities for horticultural development, expressed in terms of producers needs (that is, factors that growers need to be successful), include:

Knowledge of markets

Marketing skills

A marketing infrastructure that includes processing and storage facilities

Political and governmental support

Business management skills

Technical knowledge that supports efficient production

Access to capital

Industry collaboration such as producer and marketing cooperatives

Broader market recognition of Alaskan Grown as a premium product

P.26-27

Comments include:

No increase in price of milk to producers in 20 years.

Bureaucracy will not help producers.

Fuel costs are increasing with no increase in income.

Dairy industry not feasible at current economic conditions.

Dairy industry will suffer from closing of Mt. McKinley Meat and Sausage.

The opportunity for \$25 million in federal assistance to the dairy industry was squandered.

Need to investigate the ideas of offering mobile slaughter units.

Need to investigate the ideas of having a small slaughter and processing plant.

State vet is too busy to start an animal ID program.

Land clearing is a problem for goat producers.

Keep Mt. McKinley within Division of Agriculture.

High feed costs are a constraint to livestock production.

Promote more grass-fed animals in Alaska.

Include incentives for organic fertilizer in 2007 farm bill.

*A market for goat milk and cheese is viable.
Encourage the development of a dairy goat industry.
State should differentiate between micro-dairies (fewer than 9 milking goats) and large-scale dairies by providing different regulations regarding Pasteurized Milk Ordinance.
Provide exemption from the Pasteurized Milk Ordinance for farms with fewer than 9 milking goats.
Allow the use of home pasteurizing systems with appropriate instrumentation in place of commercial pasteurizing machines.
Require and provide training in sanitary milk-handling practices.
Offer cheese-making classes to those dairy producers who would like to expand their product lines.*

Alaska and US Food Security

When Alaska's agriculture industry collapses, Alaska will become 100 percent dependent on imported dairy and meats. The ramifications of this possibility are difficult to understand at best. On the one hand, fewer state subsidies will be consumed by agriculture, the State Division of Agriculture, Plant Material Center, and other such entities will no longer be needed and low cost out of state products could mean more money left in the pockets of consumers.

On the other hand, as consumers, we Alaskans are precariously perched at the end of a food supply chain that is aggregated from around the world and throughout the Lower 48 states, to typically flow through Washington State for shipping to Alaska.

The vulnerable nature of our situation becomes apparent when we realize that Alaskan stores, warehouses, and other outlets can only carry 3-5 days worth of food supplies before requiring renewal shipments to arrive from the lower 48. Imported dairy products are a major component of this food supply, and have the added issues of a relatively short shelf life to contend with.

This winter's storms that battered the North Western United States, helped drive this concept home when Alaska was cut off from outside food supplies for close to a week, and the impact was reflected on grocery store shelves throughout the state. If a major incident occurs that causes damage to the transportation infrastructure or supply chain between the lower 48 and Alaska, and we are unable to receive food shipments for more than a week, Alaskans will suffer significantly.

Add to this, the fact that we are also at the mercy of market whims, politics, disease, and a number of other factors beyond our control, and you wonder about the wisdom of letting our dairy farmers die out, leaving us with no alternative options for what has become a major part of a healthy Alaskan diet.

Monetary events such as Washington State and California's political interest in levying a substantial tax on all containers leaving or entering their ports, regardless of destination (and disease issues such as those found with mad cow disease in Canada, or bird flu virus

found in poultry,) could easily have an impact on Alaska's food availability and prices, that will be felt in appreciable ways by the consumer.

Though not able to provide the majority portion of Alaskan's dairy product consumables, if they survive, our local dairy farmers could readily increase production of both raw milk, and value added dairy products such as cheeses and yogurts, if the demand was there, and the people who manage our state's resources cooperate and lead our agricultural community with long term vision and independent food supply chain goals in mind.

Agriculture in Alaska or anywhere for that matter has at its foundation, the dairy industry and cannot survive long without it. The dairy industry in Alaska is a state and national security issue. The department of homeland security in its January briefing stated that the security and distribution of food product and those that create them are paramount to our population's survival in the advent of a crisis. Whether or not we wish to recognize it, We are at a crisis point here in Alaska. The death of Agriculture in Alaska is looming, and our leadership needs to stop it.

Solutions

The only way Alaska's dairy industry can survive is for it to stop being forced to compete with the lower 48. This requires the formation of a co-op that avoids the pitfalls of mismanagement found in the Mat-Su Valley Co-op of the early 70's. If the appropriate infrastructure is in place that allows a year round "farmer's market" environment, and shared resources for value added milk products such as artisan cheese, ice cream, butter, etc, the South Central market will support it. Numerous people have stated that they would gladly take the 45 minute drive from Anchorage to the Matsu Valley, if they knew they could buy farm fresh milk, cheeses, eggs, meat, and produce in a single location, year round.

Every major outlet polled has indicated interest in top quality, Alaskan made, artisan cheeses, and other value added Alaskan dairy products. The Alaskan market has shown that it will respond to this co-optive effort with open pocketbooks and vigorous buying.

Furthermore, the a portion of the co-op's resources should be diverted to marketing strategy not only within the state, but leveraging the Alaskan brand for sale of value added high-end dairy products to the lower 48, Asia, and Europe.

The technologies, drive, and abilities are all there... we just have to bring them together under one roof to see them bear fruit in a difficult industry.

As mentioned above; on May 1st 2006 Larry DeVillbus, director of the State of Alaska Division of Agriculture, created the paper entitled THE AGRICULTURE INDUSTRY IN ALASKA: A CHANGING AND GROWING INDUSTRY. His analysis of dairy production however showed that it was dropping significantly with the amount of producers and cattle in production continuing to erode. He stated that less than 5 percent

of Alaska's food needs are supplied by Alaska's growers and that agriculture products account for less than 1 percent of the state revenues. His paper also suggested the belief that Alaskans will pay more for Alaskan grown product as long as it is a quality product.

Mr. Devillbus talked about the Agriculture industry's inability to effectively market agriculture products and that this was due to high transportation and energy cost, a lack of processing facilities for raw products, and a reliance on direct marketing which has led to difficulty for Alaskan grown products to enter the traditional Wholesale retail market chain. However at the same time direct marketing sales of out of state Agriculture products outside of the traditional wholesale retail market chain were increasing significantly, and quickly eclipsed the sales of Alaskan grown products. The question is why? If Alaskans are willing to pay premium prices for these kinds of products and to do so outside of the traditional retail outlets why is that they have not purchased Alaska grown products. The answer is relatively simple and based on economies of scale and Alaskan producer's inability to jointly target the market.

Individually Alaskan farmers cannot compete against the factory farms of the Lower 48. even as a group in a combined effort Alaska farmers will never be able to meet the price point created by those out of state producers. How then can Alaskan agriculture survive and Alaska create its own food security?

Prior to 1983, Matanuska Maid was a farmer's owned co-op, and due to its management not understanding the market pull of the era, failed to compete and as a consequence, barely survived. The state of Alaska under the agriculture revolving loan fund refinanced the debt and made Matanuska Maid a state owned entity that was no longer responsive or responsible to the farmers from where its product came. Over the years it began buying more and more of its product out of state; it had no choice. Alaska's burgeoning population far out stripped its ability to provide enough dairy output. Added to this was the fact that out of state product could be purchased and transported for cheaper than that which the Alaska dairy farmers could produce, the decision was easy and had to be made.

What was not foreseen, however, was the trend that would begin approximately 10 years later for the desire of consumers to purchase natural and hormone free dairy products that corporate farms cannot provide. Across much of the Midwest the traditional family owned dairy farms began to produce these "niche" products and direct sell to the high-end consumers in the form of fresh milk, butter, and artisan cheeses, much in the same way the producers of central Europe operate. Alaskans themselves are paying high dollar for these products in stores that target sales of "healthy" products. Five dollars for a half gallon of non homogenized milk is not uncommon. Ten dollars or more for a pound of cheese is on the low end of this scale. Naturally churned butter both salted and unsalted sell at more than double the retail cost of similar mass marketed brands such as: Dairy Gold and Land O' Lakes.

So how do Alaskan farmers enter this market? Farmers markets are a great outlet for Alaskan agricultural products, but only for a maximum of a third of the year. Selling to the tourist market also coincides with this time frame. How are Alaskan farmers going to

access the market during the other 8 months of the year? Following the traditional path of selling their products to retail outlets is not viable. The amount of through put that a large box store or even a smaller retailer requires, is too large to be supplied currently or even into the projected future, by Alaskan farmers. They must access the market differently.

Once again, it is believed by many, and I agree, that Alaskans will purchase higher cost Alaska grown products if they are able to. In order for this to happen three things must occur:

- The farmers must be organized into a professionally managed co-op.
- The co-op must have a strategically located physical outlet.
- Alaskan consumers must be able to purchase product even if they do not have access to the physical outlet.
- Out of state demand for Alaskan Agriculture products **MUST** be created.
- Dairy producers as the basis of the agriculture economy must first be saved from disappearing and second achieve economic independence and financial growth through value added diversification of their product line and the direct sales that will actually generate profit above the 21\$/hundred weight break even point.

As manufacturers, agriculture producers have access, through Alaska Manufacturing Extension Partnership (AMEP), to advanced technologies and proven programs created by industry leaders. My colleagues and I at AMEP have created a plan to make possible the successful achievement of the above list of priorities and utilize Alaska agriculture as an economic development opportunity for the state of Alaska. We would like to invite you to meet with us for an in-depth review of our plan, and to solicit your input to the implementation of this plan. We are looking for partners and funding to facilitate the resurrection of agriculture in Alaska.

Sincerely,

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The Alaska Manufacturing Extension Partnership (AMEP)

The Alaska Manufacturing Extension Partnership (AMEP) is part of nationwide network of centers run under the National Institute of Standards & Technology's Manufacturing Extension Program. Each of the networks 55 centers work between state, federal and private entities to improve the competitiveness of U.S. manufacturing through technical assistance to entrepreneurs. The programs aims to overcome known barriers to success for small manufacturers including limited budgets, lack of in-house expertise and lack of access to the newest technologies.

AMEP connects existing manufacturers with national experts through the MEP network and through regional and local networks. Local businesses use MEP field engineers to gain improvements in productivity, reduce costs, increase quality and build markets. The businesses and field engineers apply Lean Enterprise practices to increase the value to customers while reducing waste in operations.

AMEP is funded by equal contributions from the Federal and State government, and from successful service rendered to private partners. Federal funds are received under the National Institute for Standards and Technology's Manufacturing Extension Program, and State funds from the Alaska Department of Commerce Community and Economic Development.

Because much of AMEP's private funding is results-dependent, the organization maintains a focused client-based orientation. Federal and state contributions, which also depend on feedback from serviced clientele, allow AMEP to work with clients who can't afford certain up-front costs. This financial arrangement forces a focus on results, and allows the organization to engage clients, independent of typical industry or institutional boundaries.

AMEP is ideally situated to aggregate agency cooperation to implement the following plan because of its federal and state mandates, interdisciplinary skill-set and access to unique funding sources. During the implementation process, AMEP would act as the parent organization, but once the project is self-sufficient, AMEP would assume a partnering status.