

FSMIP Final Report

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Date: Mar 31, 2018
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Recipient Name: University of Alaska Fairbanks
Project Title: Developing an Alaskan Fiber Industry
Grant Number: 15-FSMIP-AK-0012
Total Awarded Budget: \$ 60,739
Total Match: \$ 60,739

1. BACKGROUND

Despite the obvious barriers to agriculture in Alaska, small scale livestock farming and fiber production persists and is expanding. Some of the finest natural fibers in the world are grown by animals that evolved in cold, dry climates and are capable of thriving on Alaska's natural vegetation. Strengthened by a growing interest in food security and sustainable agriculture, the number of small ruminants (sheep and goats) being raised in the state has steadily increased. To remain viable these small operations need to recoup as much value-added from their livestock as possible. While the number of species raised and end product needs are diverse, the constraints are common to all; access to fiber processing, to markets and to continuing education on issues specific to farming in the far north.

Alaska is also home to fiber enthusiasts at all levels; livestock producers, fiber artists, and traditional native fiber arts. In the fall of 2012, a one day workshop "Alaska Fiber Production: From Agriculture to Art", sponsored by the state Division of Agriculture, was organized at the request of local fiber producers. This grass roots forum provided an opportunity for fiber producers and artists to coordinate and work towards the implementation of a fiber businesses network; The Alaska Natural Fiber Business Association (ANFBA). The core support for this Association was and remains volunteers. This grant evolved from the enthusiasm and momentum of that original meeting with the overarching goal of helping develop a vibrant, diverse, and sustainable fiber industry in the State of Alaska.

2. PROJECT GOALS AND OBJECTIVES

Four basic goals with sub-objectives were proposed for the project.

The first Goal, a Needs Assessment, used surveys both online and at different fiber venues to help define the current extent of the fiber industry and the direction its membership would like to take.

The second goal addressed communication by developing a professional website with user-friendly functionality, logo identity and social media presence. To maintain this, a number of volunteers from the different geographical regions in Alaska were recruited to coordinate and share information from their area with the statewide membership via the internet presence.

The third goal focused education. Regional fiber festivals were initiated to bring people together for marketing their fiber, workshops and networking. In an effort to incorporate and engage youth a 4H fiber curriculum was developed for 4H leaders.

The fourth and final objective focused on qiviut marketing research, in particular developing qiviut quality and processing standards. Qiviut is a uniquely northern fiber for which there currently exists an upscale, niche market. The opening of a new custom mill – Arctic Qiviut – dedicated to spinning and

marketing qiviut, provided the foundation for undertaking this research. The partnership between the private fiber mill and UAF's captive herd of muskoxen were crucial elements for establishing qiviut quality and processing standards.

3. RESULTS, CONCLUSIONS AND LESSONS LEARNED

- I. **Needs Assessment:** This relied on surveys, initially available at fiber functions and through email with the intention of setting up online surveys in the future. Response was, typically, less than a third of supporters. Nonetheless they provided a snapshot of preferences and suggested directions for the new association (Appendix A). The top 3 goals appropriate for the association were establishing marketing tools, maintaining a business network and promoting in-state fiber processing. The most important role for the association was to connect fiber people, marketing tools like the source book and creating visibility for Alaska Fiber. While the best and most efficient way to do all of the above is through a web presence and social media, it also became clear that almost a third of the respondents were not active users of social media or internet. Still, the internet and social media remains the most efficient means of connecting the many areas of the state.
- II. **Communication** – We have developed a simple logo (below) around which the new website and facebook have been designed. Having a logo creates an identity and helps define the community.



Facebook – <https://www.facebook.com/aknaturalfibers/> This web presence has proven very successful for promoting the ANFBA and connecting the fiber people within the state and beyond. Facebook is the preferred social media platform. By maintaining the facebook page we can direct viewers to the website. Facebook posts routinely reach approximately 300 people. The facebook page is most active during the summer. Recently a volunteer has started engaging viewers with the facebook page and the numbers have started to jump. It is the most popular medium for online engagement.

The website - <http://aknaturalfibers.com> is where individuals can access the source book and the fiber curriculum as downloadable PDF's as well as other relevant publications; events will be advertised and regional fiber news items promoted. Our goal is to have regional coordinators, volunteers representing different parts of the state, willing to post events and information from their area. With 5 or 6 coordinators responsibility for posting to the website does not fall disproportionately on any single volunteer. As was clear from the surveys, time and knowledge were the biggest roadblocks to online fluency and finding volunteers comfortable with online media has been difficult. To overcome this we are hoping to provide simple instructions for posting information.

Source Book – An expanded updated hard copy version of the sourcebook was released in late spring (2017) and has been published here. It was very well received and applications for the updated version jumped from 18 fiber related business originally to over 49 in the current

update. Future updates will only be available on the website. The response and number of fiber producers and businesses was beyond expectations. We currently have a volunteer in Fairbanks willing to update the book on a semi-annual basis.

- III. **Education** - A 1-day fiber workshop hosted Feb 23-25, 2016 brought in a guest speaker (Carrie Hull) who conducted a workshop on fiber sorting techniques and the importance of sorting. She also gave a plenary talk to the full conference (Sustainable Agriculture Research and Education - SARE) on forming Cooperatives and participated in the Special Qiviut Session. She was extremely well received and shared her knowledge and skill on all types of fiber. There were 23 registered participants and the written feedback was without exception – very positive. The success of the workshop resulted in the incorporation of a fiber section in Subsequent SARE conferences in Alaska.

The Fiber Festivals, hosted in 4 different regions; Fairbanks, Matanuska Valley, Kenai Peninsula and Nome were a huge success, with attendance ranging from an estimated 200 (Palmer/Matanuska) to 800+ (Fairbanks), again far exceeding expectations. The Fairbanks festival had to find a larger venue for future events. The enthusiasm generated by the festivals resulted in local communities (Palmer/Matanuska Valley and Fairbanks) independently organizing festivals in successive years. These festivals are slowly becoming self-supporting and attracting more businesses and people each year. Collectively, these events create a fiber profile within the local community and provide a venue for networking and education. In 2018, local organizations and volunteers are currently planning the third annual fiber festivals: Matanuska Valley in July, Nome in August, Soldotna in September and Fairbanks in October.

Workshop - 4-H Western Region Leader's Forum: The "Agriculture to Art: Crafting with Fiber" workshop occurred on 3/3/16. There were 36 participants (4H leaders) from all over the Western states and they attended 20-minute presentations on felting, spinning, knitting, and dyeing as well as a special presentation on qiviut all based on lesson plans in the 4H curriculum. The curriculum was very well received with offers to 'test' the curriculum and provide feedback.

The 4-H fiber curriculum (appendix 2) is available in a downloadable PDF via the website. While we originally wrote the curriculum for 4H, it is available for all youth interested in fiber projects. We are open for 'testing' and feedback from 4H and other fiber groups.

- IV. **Qiviut Research:** During the course of this study a second fiber mill opened in the Fairbanks vicinity a year after Arctic Qiviut started production. This mill (Coyote Trail Farm and Fiber Mill) uses a different brand of equipment and has a dehairing machine – expanding the opportunities for understanding qiviut processing. We are still waiting for the final data collection on the qiviut after which the results will be published both on the website and in a peer reviewed publication. Because it takes approximately a year to evaluate and process qiviut after initial harvest, we are still waiting on some outstanding results before the final write up is complete.

The most significant results of the qiviut research are:

- a) **The importance of simple sorting.** Sorting fiber by cleanliness/fiber type/color is fundamental to virtually all commercial fiber operations. However, it seems the scarcity of qiviut has resulted in the mentality that every little bit is valuable. Yet, imposing the simplest level of sorting (clean qiviut without dander or excessive guard hair contamination) on shed qiviut increases dehairing

yield and results in a finer, more evenly spun yarn. The return is a greater volume of high quality product.

- b) **Farmed qiviut is far more difficult to process than qiviut combed from hides.** Arctic Qiviut did not have a dehairing machine. Their major qiviut supply was combed from the hides of subsistence harvested muskoxen. This qiviut could be adequately dehaired on their carding machine. However, farmed qiviut is shed with multiple fiber types and requires mechanical dehairing prior to carding. Before LARS qiviut could be processed through Arctic Qiviut it first had to be dehaired elsewhere. Appreciating how the method of collection impacts milling makes a significant difference to final quality.
- c) As part of the qiviut study we had the opportunity to look at the influence of a nutritional supplement (Smartamine) on strengthening qiviut fiber thus reducing breakage during processing. The final results of this study will be evaluated following the 2018 qiviut harvest. Results will be posted on the website.
- d) An unexpected outcome of having local fiber mills is the ready access to the 'milling drop', fiber that falls out during the milling process. In general, it is coarser and shorter than prime fiber and not suited to making 100% qiviut yarn. However, it retains many wonderful qiviut characteristics. In an effort to use this byproduct we have engaged the help of the local fiber community to generate and test creative ideas (small scatter rugs, blending and felting the fiber, insulation in coats/vests/quilts).

CONCLUSIONS AND LESSONS LEARNED: When ANFBA was first proposed, there were no options for in-state fiber processing, a huge roadblock to growing a value-added fiber industry in Alaska. The association was viewed as a mechanism to focus energy and resources towards facilitating in-state processing. The fiber community has eagerly embraced the workshops, publications and events organized through this grant, with volunteers stepping up to carry the most successful components into the future. The ANFBA formed a board of directors with the goal of achieving non-profit status. However, maintaining a board of directors with state-wide participation is very difficult without the support of a larger entity (State/University) providing the continuity and infrastructure to host formal meetings (teleconference etc).

For now communication has emerged as one of the most important roles the association can play in this evolving industry. It is also one of the most challenging. This grant provided the ability to create online infrastructure (website and facebook) and volunteers from the fiber community are there to keep it current and reflective of fiber business in Alaska.

FINANCIAL SUMMARY: Final Grant expenditures to Dec 3, 2017

Grant Expenditures	FSMIP Award	Spent	Remaining
Personal Services		\$1,154.99	-\$1,154.99
Staff Benefits		\$599.45	-\$599.45
TRAVEL	\$8,122.00	\$4,174.88	\$3,947.12
COMMODITIES	\$13,600.00	\$14,066.88	-\$466.20
OTHER (services)	\$25,000.00	\$27,038.24	-\$2,038.24
F&A costs	\$14,017.00	\$2,712.05	\$433.19
TOTAL	\$60,739.00	\$58,863	\$1,875.87

Travel: In the original award we budgeted for foreign travel. This was ultimately replaced by domestic travel when an equivalent opportunity arose within the United States.

Other (services): Incurred extra charges on website development and publication costs. Photographic services for publications were a part of contractual services. However, because we used resources within the UA system, this individual had to be paid via payroll as per University policies and procedures.

APPENDIX 1: SURVEY RESULTS



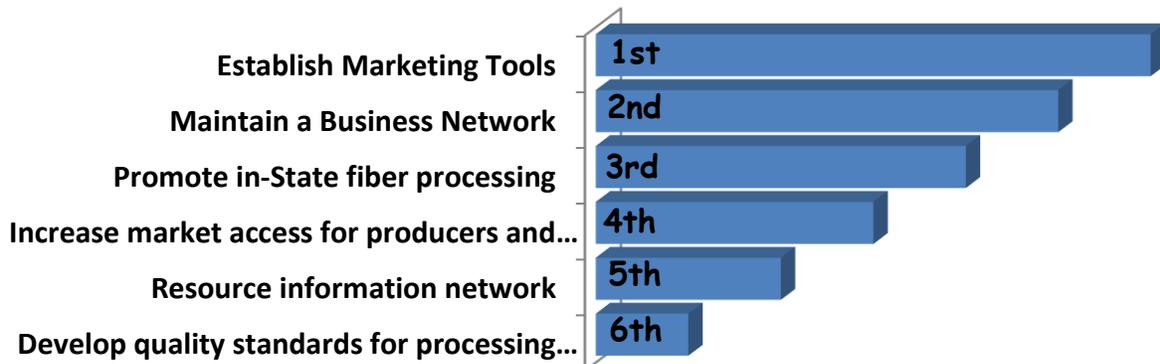
Survey Results

Written Surveys were made available at the SARE Conference, the fiber and qiviut workshops and at the three Fiber Festivals. The following compilation of results represents a snapshot of Alaska's fiber industry in 2015-2016.

GOALS

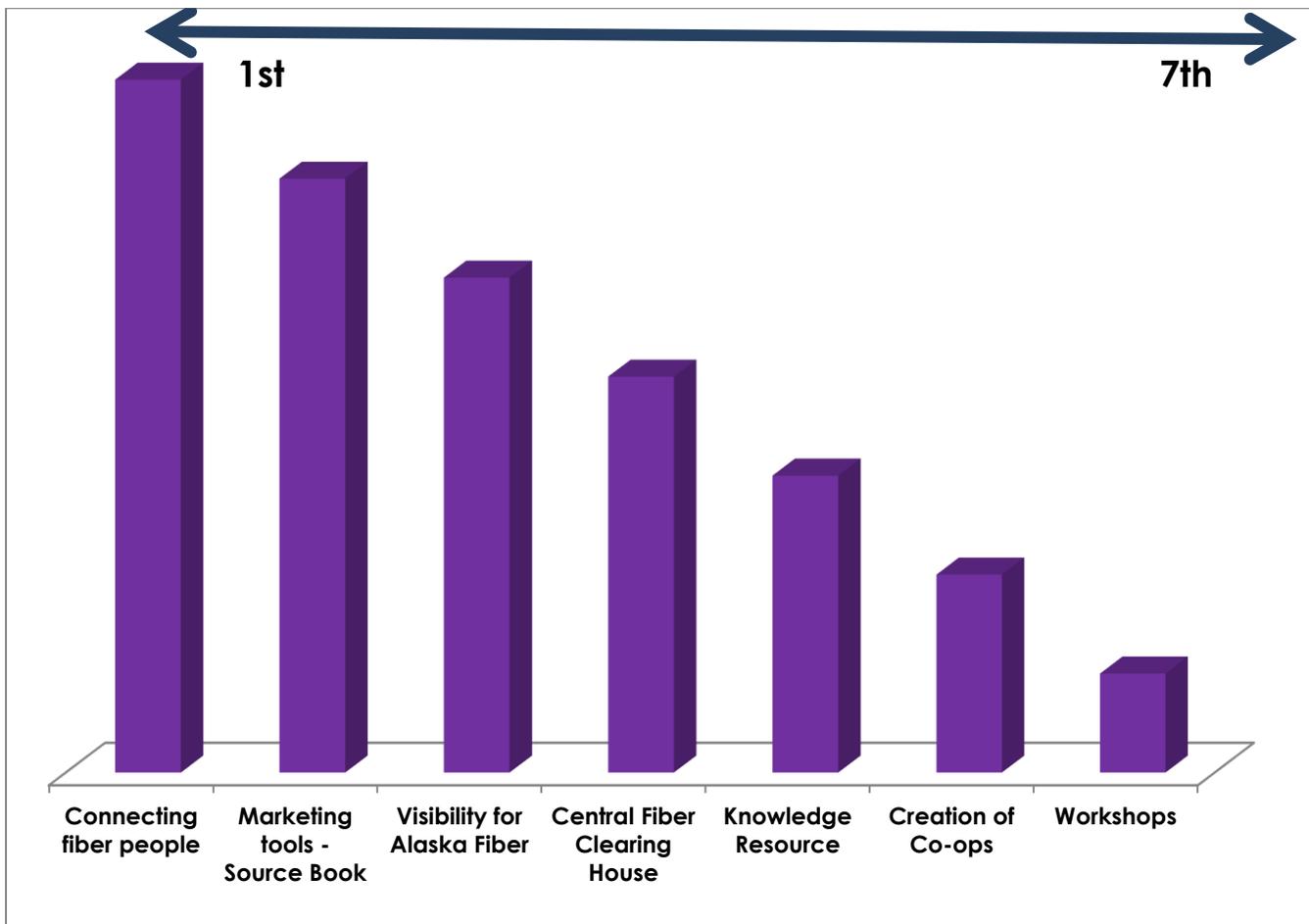
We set out six goals for the Alaska Natural Fiber Business Association and asked members to rank them from the most important (1) to least important (6).

Most Important Goals for ANFBA ranked on a scale of 1-6



We asked: What members would like to see the Association provide for the membership?

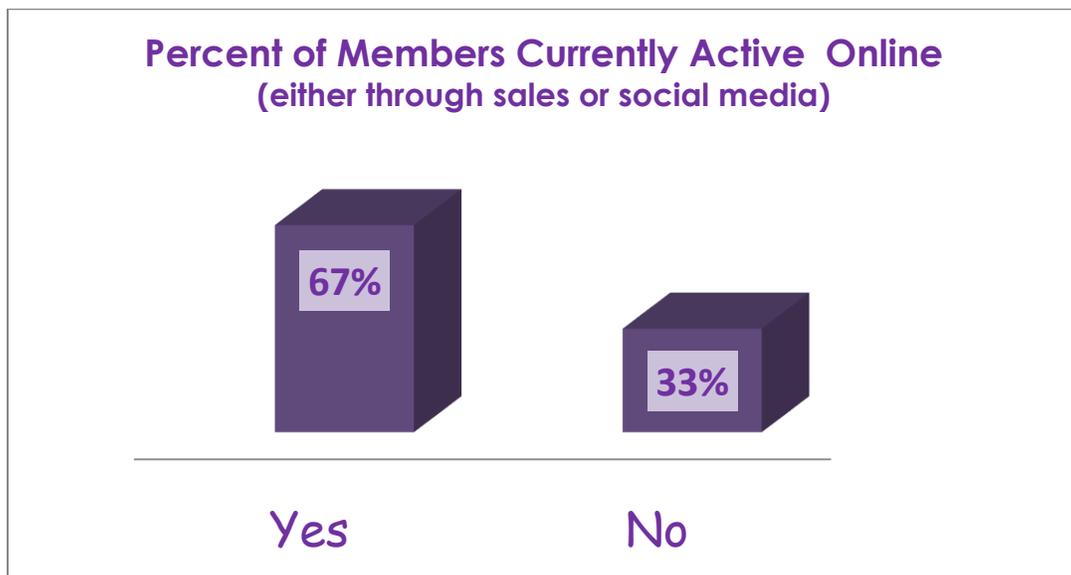
We identified 7 resources the ANFBA could provide and asked you to rank them from most important (1) to least important (7).



Online Marketing

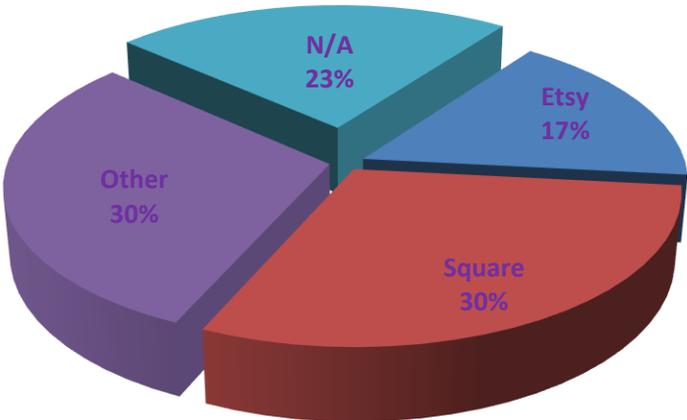
In a state the size of Alaska, the internet is the single most important tool for communication and marketing.

We asked what percentage of the fiber community was currently active online, whether this was through the use of internet based sales or social media.

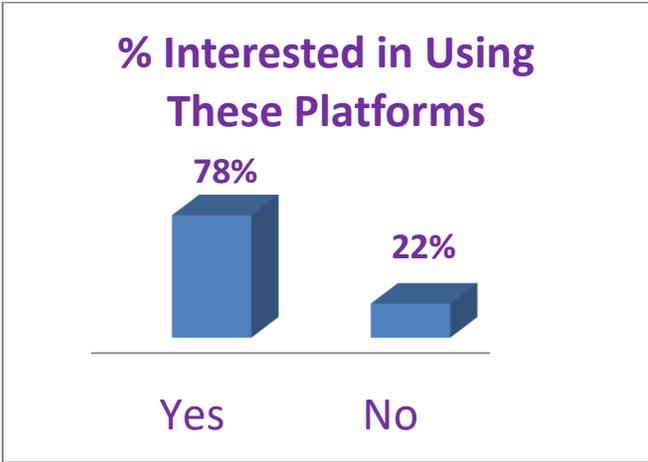


Among those who use the internet for online sales

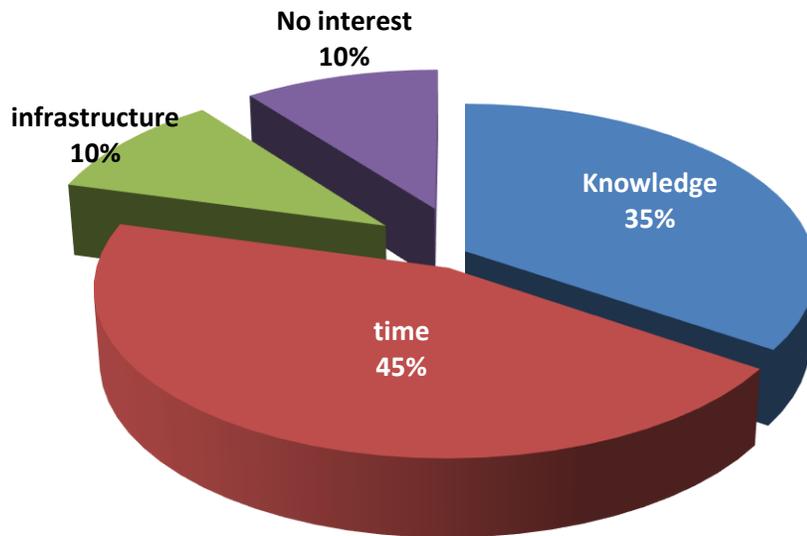
Percent of Members Using Online Platforms



The number of people interested in using online platforms

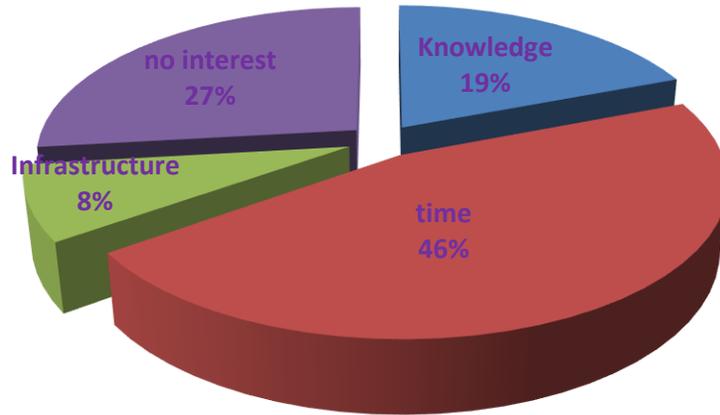


Biggest Roadblock to Using Online Sales

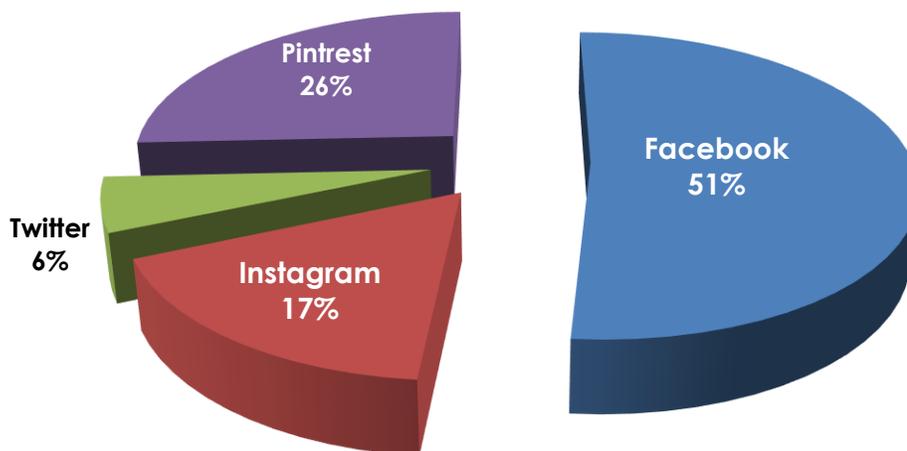


Social Media

Biggest Roadblock to Using Social Media



Type of social media most commonly used



APPENDIX 2: SOURCE BOOK

See attachment

APPENDIX 3: FIBER CURRICULUM:

See attachment

Appendix 4: The upgraded website is undergoing final updates and should be live by the end of the month. At that time it can be accessed through aknaturalfibers.com/