



# EdibleNet

## The Net Wrap That Is Efficient and Safe

*A Round Bale Net Wrap That is Consumable By Ruminates;  
Saves Time, Animals, and The Environment.*

Concept Idea By Grace Bergstrom

## Executive Summary

**Concept Description:** Current hay round bale net wrap is timey to remove and dangerous to cattle when left on. EdibleNet is a digestible net wrap that was designed to reduce manual labor, diminish livestock death loss, and eliminate plastic waste. This net wrap is on the front line of technology. Time that livestock owners save can be allocated to more preferred activities. Benefits include forever ending jumping out and back in the tractor to struggle to remove frozen net wrap in the winter.

**Opportunity:** When talking to local cattle owners one issue that is relevant among many is the time spent removing net wrap. EdibleNet captures a large percentage of the ranchers that do not remove net wrap even as it is recommended by veterinarians and extension agents. Currently there is not a product like EdibleNet on the market. EdibleNet not only is digestible but also ruminant aiding through using hemp. The hemp base net wrap is a roughage that has a favorable source of rumen undegraded protein, with high post-ruminal availability. Recent trials in Kentucky reveal that hemp-fed cattle require less feed and digest it more efficiently. The netting as a whole is strong however, the individual tensile strength allows pieces to tear when the cow eats.

**Innovative Solution:** EdibleNet replaces traditional plastic net wraps. The sizes produced will be able to be used in most current baling systems. Fiber that has been extrude from hemp will be spun into strands. These strands will be woven into netting and covered with hemp oil which allows for outside storage. This saves the producer on needing building coverage and allows for easier expansive bale storage outdoors. Through research the hemp coating will decompose over a time period of 2 years. Conversely, EdibleNet can go through a manure spreader and will rip apart. However, this hemp-based wrap will withstand being moved many times before being fed. This saves the livestock owner time and money by not needing to clean off entangled plastic from equipment, it won't wreck ball bearings. EdibleNet will eliminate the health concerns revolving around toxic material consumption.

**Value Proposition:** Ranchers that currently do remove their net wrap take valuable minutes to perform that chore. The benefit of EdibleNet to the producers that have an off the farm job would be the time management to more dollar conversion. About half of farmers already have a second job to report to which decreases availability to do chores. Customers can buy EdibleNet with online orders or at ag supply stores. Current producers of plastic net wraps like Tandi Netwrap should be able to convert present knitters to EdibleNet hemp strands. The pricing will depend on hemp markets.

**Competitive Advantage:** The competitors of EdibleNet will be the current producers of edge-to-edge type net wrap. In the US that would include companies like TamaNet and

BaleTuff. These companies provide a product that is similar to EdibleNet in the features of covering the bale over the edge, being strong, and still within a workable roll weight. One product difference that the competitors have is different color options. These companies' products are fossil-fuel based plastics with the qualities being so similar to EdibleNet consumers will now have the choice to choose a more environmentally healthy, livestock safe alternative.

**Entrepreneurial Team:** EdibleNet's vision will benefit from a complete hemp biomaterial research team. Current research that allows for hemp to be made into threads which is woven into fabric can expand into net wrap threads. Venture capitalists provide financial backing and a money manager to head a financial department is needed. Hemp growers and cattle producers will have valuable input. Salespersons to research current marketing techniques to improve upon for EdibleNet. Developers switch over plastic thread manufacturing to hemp thread. Also, a team leader as manager to give reports to.

**Financial Highlights and/or MBV Outcomes:** EdibleNet wrap is currently in the product development stage. The estimated fixed overhead expenses are \$70,000. This includes items like rent, salaries, insurance, and depreciation on equipment. Another big expense is buying equipment. Knitting machines that are used to make bale wrap sell from anywhere between 50,000 and 80,000 new. Selling EdibleNet wrap at \$312 a unit will allow for a 40% margin. It would take 561 units to pay off the fixed overhead expenses. The proposed facility can produce eight rolls a day. At 80% capacity, about 2,300 rolls can be produced each year. This allows for Fixed overhead expenses to be paid each and have profit left over. It would take 4.6 year to reach the 1 million revenue target. During hay producing season there will be a higher demand which will allow for off-season inventory increases.

## Consumer Problem

### **EdibleNet**

#### *The Net Wrap That Is Efficient and Safe*

Removing the net wrap before feeding a bale is timely. Struggling against poor weather conditions to remove all pieces of adhered net wrap for the animals safety adds additional time. Therefore, EdibleNet was envisioned. EdibleNet is the first of net wraps that can be consumed by ruminant livestock. Simply feed a bale with EdibleNet assuring you do not have to take the time, effort, and energy to remove the net wrap. This net wrap has a hemp base which is a roughage. Ruminant diets are composed of many different roughages, like alfalfa and clover, which are beneficial to digestion. No more struggling and worrying if all the net wrap was removed after being frozen to a bale! EdibleNet is great for busy livestock owners who need the extra time to spend somewhere other than feeding bales.

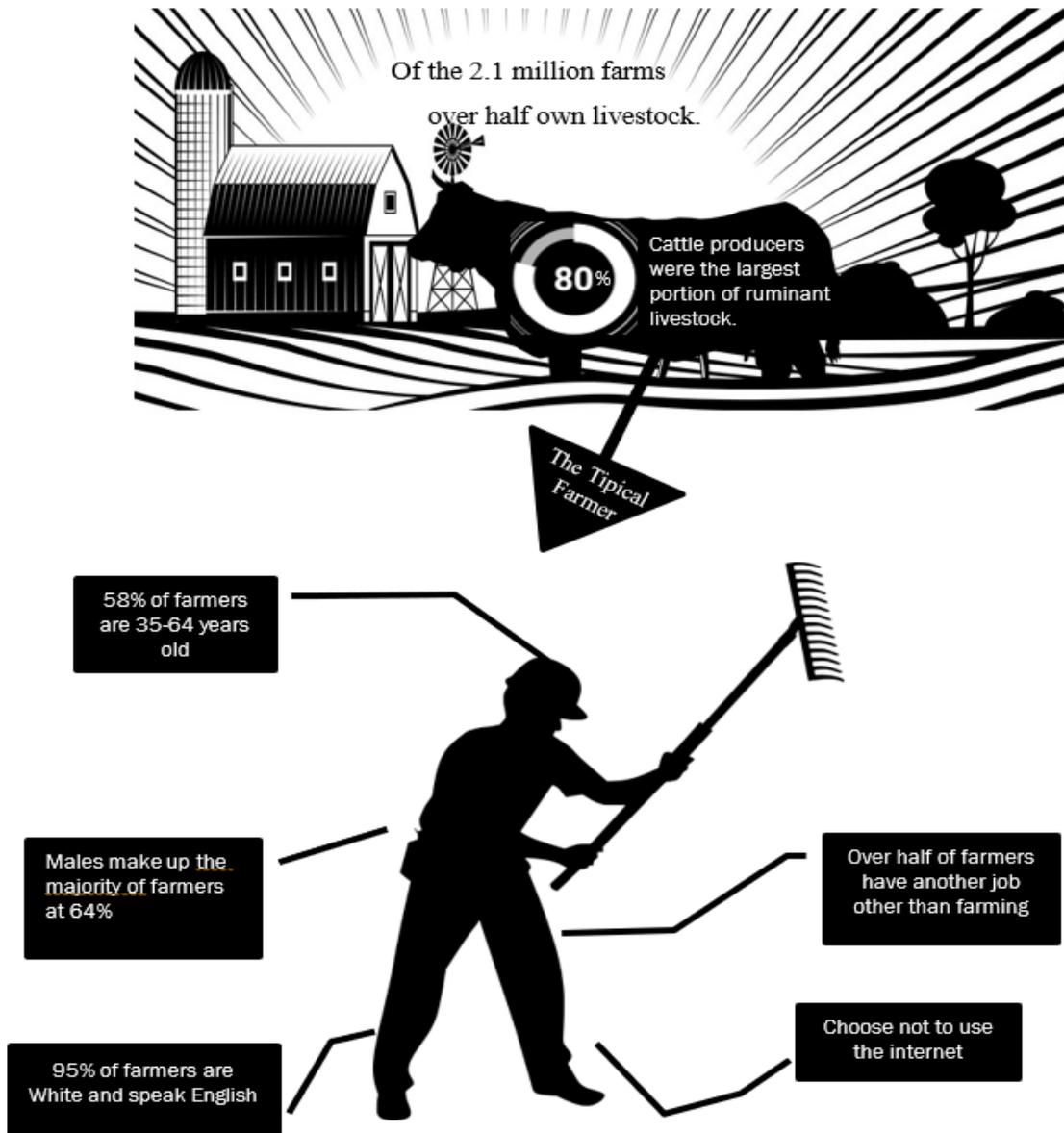
EdibleNet comes in the standard net wrap sizes which includes the Edge to Edge option! Keep using the same baler as EdibleNet fits most net wrap kits. See local farm supply stores for selection. Or order online at [EdibleNet.com](http://EdibleNet.com) Price: \$312 per roll

EdibleNet is a one-of-a-kind product. It gives the consumer an experience that has never been felt by other products. EdibleNet affects each consumer differently as it is a versatile product. Consumers who wish to cut down on time spent removing netting from bales benefit from EdibleNet. They no longer have to go through the time exhausting steps of cutting net wrap, pulling it off without ripping, and fighting to wind it up to discard. These steps become more prudent when combining them with working in poor weather conditions. Iced adhered net wrap is nearly impossible to remove in one piece. Mangled net wrap leaves pieces behind which potentially can be consumed by an animal. Spending the time to remove these small pieces in order to make sure no animals become sick is tedious. These steps are not the relevant issue, as the primary issue is time constraint within the consumers busy life. Any saved time could be allocated to more preferred activities.

Farmers who currently feed bales with the net wrap still intact will benefit from EdibleNet. This non-removal of the net wrap may permit the rancher the saved time when feeding, however when animals consume the harmful plastic of traditional net wraps they may become sick. Afflicted animals will need to be treated which is a

medical expense and a possibility of a costly surgery. Most animals that are sick from consuming round bale net wrap go unnoticed until it's too late. EdibleNet can be fed directly to the cattle with the net wrap remaining on the bale as it is digestible for ruminants. Having this feature cuts the cost of veterinary treatment expenses and the cost of losing a production animal. EdibleNet gives the consumer financial and emotional peace of mind.

## BREAKDOWN OF THE FARMER



The target consumer is a 35-64 year old male cattle producer who uses round bales. About 58% of US farmers are within this age group. Out of all the US farmers, 64% are males. Of the 2.1 million farms in 2017 over half of them had either cattle, sheep or goats. Cattle made up the largest portion at 83% of the ruminant livestock (non-ruminant are horses and pigs). The average amount of head of cattle on an operation is 50. Operations with less than 50 head of cattle normally have a second source of income. This persona type was selected as the target consumer as EdibleNet benefits them abundantly. Time is money, especially to the farmer who has 1 million things on their priority plate. Cattle owners understand this especially as cows are hard on things. The maintenance on a farm may be a lower priority and if a farmer could save time on one part of chores they may choose to allocate the extra time to other chores that have been overlooked.

**John: The Typical Farmer**

**Lifestyle:**

- Late nights come home from work at 3am
- Mornings start around 10:30
- Leaves for work at 3pm
- Body is old and sore from working in the trades
- Has 55 cows
- Cattle chores are simplified and bare minimum due to lack of time
- Does chores alone

**Demographic:**

- Male
- 52 years old
- Married
- Lives in Nebraska
- All kids are moved out (college or otherwise)
- Grew up on a cattle farm

**Pain Points:**

- Limited time during the day
- Chores are timely with only one person
- A lot of jumping in and out of equipment

**Business Background:**

- Two-year degree in the trades
- Has been in cattle industry since 18
- Has second job (or income) as a night electrician
- Wants to sell farm to son
- Wife does day care

**Where do they go for Information:**

- Newspaper (livestock based)
- Neighbors
- Dealers
- Very little use of online

Of all the possible consumer archetypes that EdibleNet could target, the Sideliner is the largest. The reason for this is that farmers rely on neighbors they trust to “try it out” first. Most farmers do not decide on buying a product because they read about it. The cause for this is each farm has its own situation and product testing is normally tailored to get the best outcome. However, the Sideliner is the second most important consumer archetype as they follow what the neighbors do. The most important consumer is the neighbors that try EdibleNet first, they are called Seekers. Seekers want to try the most advanced technology to see if it will solve the targeted problem. There are two reasons why the Seekers are the most important. The first reason is that they are the key group to get others to try EdibleNet. If EdibleNet is sold to a large

enough portion of Seekers, the Sideliners will be introduced to EdibleNet also. The second reason why Seekers are most important is because they help determine if your product will continue to grow. If EdibleNet does not live up to its promises, the Seekers will tell the Sidelines it is not worth the time, effort, energy, or money to get it. For this, Seekers will be the first archetype to target in order to get to the largest group, the Sideliners.

## **Product Problem**

Traditional round bale net wraps that are being used presently have many problems that come with them. One issue would be that they don't decompose overtime as are made of plastic compounds. This means the farmer cannot burn net wrap and used wraps will take up space within a dumpster if it is properly disposed of. And dumpsters cost money. Some farmers choose to burn the plastic wrap as it is an easy way of disposal. However this is bad for the environment. After all this being stated, accordingly it is known that cows cannot eat netwrap plastic. This instigates the active removing the net wrap. The problems that arise with plastic net wrap when not completely removed, could be animal consumption which leads to various problems. Also, plastic that is left behind in the feedlot can be caught within equipment tires, axles and bearings. Plastic is very destructive to equipment. Removing bound net wrap is a very timely and tedious, annoying and problematic task. Physical pain may ensue to remove within plastic these weird areas. EdibleNet solves the problem of net wrap being made out of plastic. Cows can eat it, yet it is strong enough to encapsulate the bale to be moved many times. If cattle do not consume all the hemp EdibleNet, it will start decomposing within the lot hay pile. Most farmers spread manure yearly which is not a long enough time for it to break down within the pile. The tensile strength will break under pressure when a cow eats it or if it is put through a manure spreader. No more having to worry about cleaning off twisted up plastic from the manure spreader beater bars.

EdibleNet is nearing the end of the concept stage. This idea started out as a family joke. Everyone within the family hates the timely chore of cutting off net wrap. Oftentimes, the person feeding cattle is working alone. The largest annoyance of this is getting in and out of the equipment. From this problem, the idea of having a net wrap which is safe for cows to eat was formed. The first thing needed to be done is having a product that can be woven into netting yet is nutritionally beneficial to ruminates. Hemp is the perfect product for this endeavor as it is currently being used in many products and also is a roughage. Next, is the roadblock of having it weather resistant. Adding a hemp oil coating will allow for better weather resistant properties. Hemp is an anti-microbial product which will help with fighting off microbes within the dirt that break down net wrap. The hemp oil can have sweeteners and colors added. The sweeteners idea would be for palatability to assure the cows eat all of the net wrap. This will help with limiting

waste. The color gives the farmers the option to categorize hay by net color as it is baled from different locations. Both of these hemp items are byproducts which are renewable. This helps EdibleNet be economically and environmentally efficient. Another major feature that EdibleNet possesses is the actuality it will fit in current balers. This will allow for farmers to easily convert to using it. One development advantage is that hemp is already being converted into products such as robes, fabric, packaging and paper. The extension of the current hemp fiber and strand research should be easily conducted to provide properties needed for EdibleNet effortlessly.

## **Market Problem**

The market segment EdibleNet is aimed towards has experienced a slow growth timeline and lack of developments. The first round baler was manufactured in the 1970's even though the first hay baling equipment was invented in the late 1800s. More than 20 years after the round baler, net wrap was introduced. Following the introduction of net wrap small improvements have been made within this product. Addition of color choices, different wrapping styles, and reflective tape to show when the roll is almost depleted. Within today's drive of producing eco-friendly products and reducing harmful waste material, net wraps are being evaluated again. Farmers are targeted for having large amounts of waste and wish to reduce their carbon footprint. More farmers are trending towards organic or sustainable farming. If net wrap is not converted into a more eco-friendly option, landfills will be filled with bale wrapping plastic and waste.

Currently there are no edible bale net wraps advanced beyond out of field testing. BioNet based out of Europe is nearing the end of feed trials. BioNet states humans have consumed their biopolymer product with no consequences. Humans' digestive system differs from animal digestive systems and will affect them variously. EdibleNet will enhance cattle digestion as it will have a high amount of undegraded ruminant protein and post rumin and availability.

EdibleNet will launch in the Midwest. One motivating factor for this is the winter climate. Displaying the extra benefit of not having to fight against frozen net wraps will draw consumers to this product. Minnesota has 20,000 beef cattle producers. South Dakota ranks higher than Minnesota for in cattle numbers. These two states are located within a reasonable target area. In order to access this market, EdibleNet will have to be placed both in stores and online. Stores that will be addressed first already stock and sell net wrap. This ensures that EdibleNet is seen by potential customers. The average farmer does not choose to navigate the internet. However, those who do surf the world wide web will not be excluded from this product.

## **Business Model Problem**

The gap my product addresses is better user efficacy and reduction in waste. The idea that a net wrap can be digested by a cow is a new feature to the net wrap market. The pricing for EdibleNet will be marked up 25% higher than traditional net wrap. This 25% mark up is due to material and production costs. The overall goal is to keep a high level of market efficiency. EdibleNet will supply information about the product to both the seller and the producer. There will be no disadvantage of the producer knowing and understanding the process when the customer does not. By informing both parties, this helps minimize the bid-ask spread which ultimately will allow the customer to understand more about the product and the pricing behind it. The goal for EdibleNet is to distribute to wholesalers. For example, this would be a Runnings, Fleet Farm, Tractor Supply Company, and online stores. For this reason, there has to be an understanding of both the wholesale pricing and retail pricing. The retail price would be \$312 per roll. However, the wholesale price would vary depending on the wholesaler. This will be reflected in volume discounts, warehousing inventory control costs, delivery costs, which is all negotiable per vendor.

Due to limited research on edible hemp net wrap, the price for the materials is uncertain. The transaction for buying EdibleNet will be very similar to traditional net wraps, either in stores or online. However, if a consumer is able to preorder by both website or in person at a dealer, before a fall deadline they will receive a preseason discount.

The other material used for this product is paper cores. The price for the paper core is 4.65\$ a roll. The machine can produce 1 foot of wrap a minute allowing for 4 rolls to be made a day. The work day would be 10 hours and conceivably there would be two machines going allowing for 8 rolls to be made. At 80% capacity, about 2,300 rolls can be produced each year. This allows for fixed overhead expenses to be paid each and have profit left over. It would take 4.6 years to reach the one million dollar revenue target. The average beef producer in the midwest has 30 head of cattle. Each cow consumes approximately 6 bales throughout the winter. Hence a herd with 30 animals needs 180 bales to overwinter. One roll of EdibleNet wrap can make 110 bales.

Minnesota has a little over 20,000 beef cattle producers and in order to sell all of the inventory would have to reach about 6% of the market.

1	Typical Product Manufacturer					
2	Price	312				
3	Direct Labor	105				
4	Materials	82.2				
5	Total Direct Costs	187.2				
6	Gross Profit	124.8	40% margin			
7	Fixed Overhead Expenses	70,000				
8	Minimum Requistie Volume	561 Units sold				
9	1 milllion revenue target	8,013 Units Sold				
	Total Needed to be sold to pay					
10	Burn and reach target	8,574 Units sold				
11						

## **Operations/Commercialization Problem**

Here is outlined the few steps needed to get EdibleNet from the concept stage to the marketplace. One area that will be outsourced is growing hemp for the stem source product. Having a partnership with a hemp producer will be a key factor. In order to have a product converted into net wrap all year round, more than one hemp farmer may have to be contracted. This will help with seasonal influences within the hemp growing sector. Transportation will be another outsourced category. This would include transporting products from the field to the factory, then from factory to warehouse, and finally, from the warehouse to the wholesale dealer. Another ideal partnership which would aid in EdibleNet's success would be a team which specializes in cattle sweeteners and palatability indicators.

Development of a product will be the first priority, then be followed by field testing. Promotion of the product within marketplaces will follow. Currently, it is unsure who will do this work. College educated researchers and experienced salespersons would be beneficial. In the factory sector type jobs, individuals which possess a high school degree will be targeted.

## **Resource Problem**

Throughout development of EdibleNet many hypotheses have been covered- concerns of how long the net wrap will last; if it is strong enough to withstand being moved; being safety ingested by a cow; what becomes of the leftover uneaten pieces; retaining elements of traditional net wrap including size, multiple colors, and wrapping style; and time appropriate for decomposition. Local interviewing of agriculturists indicates a willingness to try EdibleNet. All of these baseline ideas must be thoroughly considered before proceeding to the next stage. Currently, factors that need assessment include how easily hemp can be converted into a thin strand and the durability to withstand bale movement and early decomposition. In order to answer these integral factors for success, a team of net wrap developers will have to work with hemp enthusiasts in pursuit of the end goal. Hemp is an abundant renewable resource to pursue.

## **Recommendation**

This project concept is strong enough to continue investigating and investing in. In contemplation of getting EdibleNet on the market, the first necessity is product research. This research will underline what hemp fiber and oil will be best for the goals of this project. Following will be product design and development which will investigate how to reach all the envisioned features. The resource vital to reach the marketplace is financial backing for start up costs. One large threat recognized is development of other

products of similar idea to EdibleNet. It will be a race to see which company can get the first successful product on the market. EdibleNet has anticipated not being the first product of its kind therefore it focused on adding extra features. This noted feature would be the hemp netting being nutritious and aiding in digestion. Including this feature will give EdibleNet leverage within the market.

## Concept Portfolio

### Additional Consumer Concepts

#### **EdibleNet**

##### *The Net Wrap That Is Efficient and Safe*

Trying to be environmentally friendly while having limited options to do so is frustrating. Traditional round bale net wraps are one time use products made of plastics. Used discarded wraps end up in landfills and take years to decompose. In order to help do your part EdibleNet was created. EdibleNet is one of the first net wraps made of a completely natural material which decomposes and is consumed by livestock. Simply feed your livestock bales wrapped with EdibleNet to reduce plastic waste! Any netting that is left over will decompose within a two-year period in the correct environment. EdibleNet is great for a livestock owner who wants to make a difference reducing their environmental impact.

EdibleNet comes in the standard net wrap sizes which includes a 'How To Make Your Own Compost Pile' pamphlet! Keep using your same baler as EdibleNet fits most net wrap kits. See local farm supply stores for selection. Or order online at [EdibleNet.com](http://EdibleNet.com)  
Price: \$312 per roll

## EdibleNet

### *The Net Wrap That Is Efficient and Safe*

Animal care is an important routine that is carried out on farms. When an animal suffers due to factors beyond the producers control it is financially and emotionally taxing. EdibleNet was created to help reduce the risk of ingesting harmful materials. It is the first of it's kind of net wraps that can be consumed by ruminant livestock. Simply feed a bale with EdibleNet and let the worries of losing a cow sunside. This net wrap has a hemp base which is a roughage. Ruminant diets are composed of many different roughages, like alfalfa and clover, which are beneficial to digestion. Be financially and mentally confident with your animal care!

EdibleNet comes in the standard net wrap sizes which includes a pamphlet of nutrition facts about hemp! Keep using the same baler as EdibleNet fits most apparatuses. See local farm supply stores for selection. Or order online at [EdibleNet.com](http://EdibleNet.com)  
Price: \$312 per roll

## Additional Persona



### Noah, The Organic Farmer

**Demographic:**

- ▶ Male
- ▶ 38
- ▶ Married
- ▶ Lives in Minnesota
- ▶ No kids
- ▶ Grew up on a cattle farm

**Business Background:**

- ▶ 4 year degree in Ag business
- ▶ Minor in Environmental studies
- ▶ Has been in cattle industry since 33
- ▶ Has second job (or income) at an Ag financing office
- ▶ Wife is an accountant

**Lifestyle**

- ▶ Has 23 cows
- ▶ Mornings start at 7 to check cattle
- ▶ Goes to work from 9am-5pm
- ▶ Does some work at home
- ▶ Chores are done after work

**Pain Points:**

- ▶ Limited time during the day
- ▶ Does like the wastes form chores

**Where do they go for Information:**

- ▶ Online sources- fact checked, research based
- ▶ Neighbors
- ▶ Dealers

## Additional Archetype

Fed-Up describes an additional archetype that will be targeted when marketing EdibleNet. These people are similar to the Seeker as they are looking for a product to solve a problem. However, the Fed-Ups are not as interested if the project uses new technology. These people have been using net wrap for a long time and endure the problems that come with it. The Fed-Up archetype is an easy target as it does not have to follow the success of another archetype like the Sideliners do.

## Analysis Of Core Target Customers

EdibleNet 6 C's Model	
Circumstance	Has a busy life and time management is a must
Context	Finds removing net wrap is timely and laborious
Constraints	Not willing to pay for product
Compensating Behavior	Leaving net wrap on bale Hire second person for help
Criteria	Will EdibleNet reduce the time to feed bales allowing time to spend with family
Consequences	Using EdibleNet will help save time and reduce animal health risks.

# Experience Map

**Product Name:** EdibleNet  
**Product Owner:** Grace Bergstrom  
**Value Proposition:** Most efficient net wrap  
**Consumer:** Paul: has two jobs, one is raising cattle and the other is in town

		Learn	Decide	Use	Enjoy	
<b>Journey</b>	<b>Realize Need</b>	With having two jobs, I have to split my time between both of them, yet still have personal time		I need to lessen my personal time so I can complete feeding cattle and getting to work. I already have limited personal time which i enjoy and dont want to give up. My town job has set schedule so it would be best to shorten feeding time.	I feed cattle bales with EdibleNet and still had time before my town job. I used this extra time to projects finished.	EdibleNet is a time saver. I can feed cattle is less time now
	<b>Inform</b>	I read that over half of the farms US are considered to be small scz These farms can not rely on the f the only income. Like myself, the farms must have other emplmei make ends meet.				
<b>Consumer Actions</b>	I used to burn all my used net wraps but a new law states only natrual products can be burnt	I agree with reclying and enjoy be able to take part in reducing was don't like how I have to use spac trash can to dispose of net wraps	I wounder if the netting will last outside. I have no inside storage for hay.	Having more room in my trash can will be nice. Now I don't have to decide what I should throw away to lack of room.	EdibleNet kept me from fight agasint frozen net wrap. It wa easy as just set the bale down and go	I no longer have to stuff net wrap into my trash. I enjoy reducing the amout of waste I put in land fills.
<b>Consumer Thinking</b>	I hate having to climb in and out of the tractor/skid loader to remove the net wraps. I try my best to remove all of the net wrap. Sometimes it is frozen or stuck under the bale so I cant get it. Not only is it hard on my body but also is dangrous.	My neighbor lost a cow when it a wrap that was missed. I dont war to happen to any of my animals. only would I be powerless to help that cow, it would cost me great	If this causes my cows to decrease in preformance, it will be costly. I rather keep my cows preforming well if it means saving money.	My cows come home from pasture in the fall. This means I only feed bales in the cold. I want to not worry about being out in the cold too long during chores.	Today chorse went very smoothly. I didn't have to get in and out of the tractor so I wasn't sore after.	Thankfully I can do chorsse more safely. Not only is it more safe for me but also the aniamals.
<b>Consumer Feelings</b>						

## Collected Consumer Research

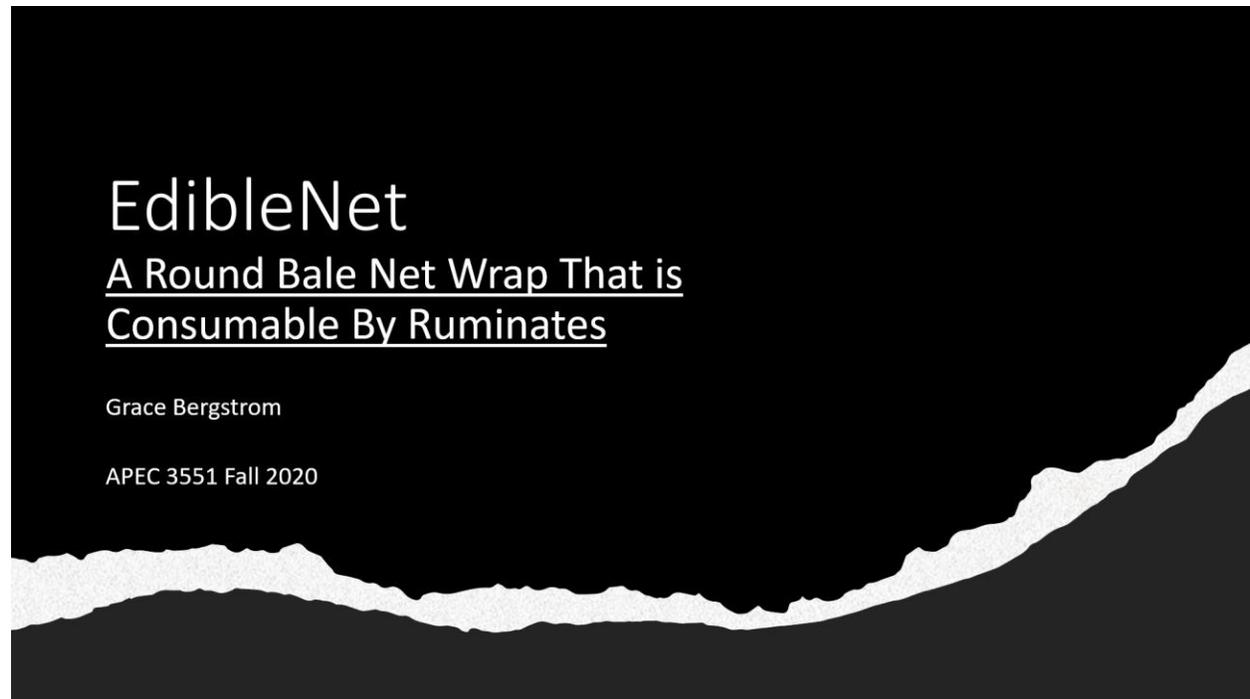
When surveying the target market I interviewed thirty currently active livestock producers and custom baling business owners. The interview tactic I learned in marketing class about posing a question in a roundabout way was used. One question asked to livestock producers was "Would you say the majority of your cattle are fed round bales?". Also asked was "If a secondary person would make it easier to complete that feeding chore?" When speaking with individuals owning custom operations I asked "What percentage of round bales are currently wrapped with net wrap." Once I asked my list of questions and listened to the responses EdibleNet was presented. One final question was asked of participants "Would you consider buying this product?". 90% of the people interviewed answered yes to the idea of buying EdibleNet and seeing how it functions.

## Unfeasible Features

One feature that was desirable for the customer but not feasible was infusing minerals into the net wrap. The reason why infusing minerals is not feasible is due to the potential risk they can cause. For example, if one cow really enjoys eating the net wrap and the producer puts in multiple bales, this cow can overdose on minerals. Also, if the

producer relies on the infused net wrap to be the only source of nutrients and not all cows get an equal amount of net wrap, there will be deficiencies within the herd.

## Presentation Slides



## EdibleNet

### Features

- Hemp base
- Covers edge to edge
- Consumable for cattle
- Saves time



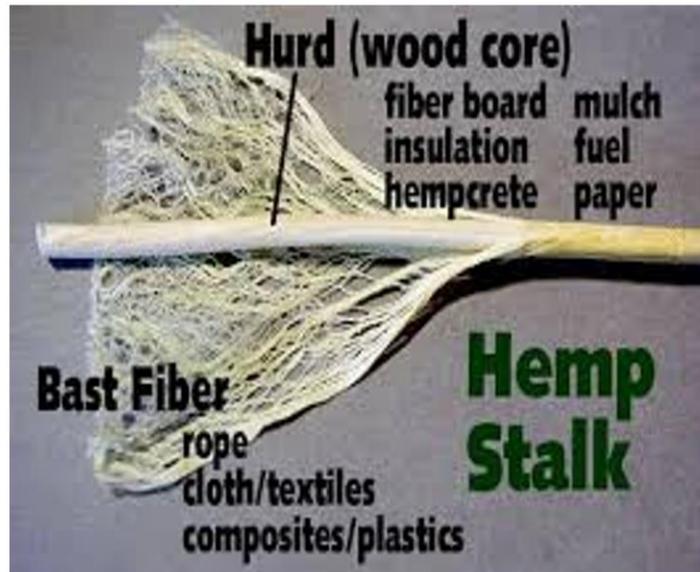
## How it works

- Being consumable saves time
- Hemp is a rumen aiding roughage
- Trials in Kentucky show benefits of feeding Hemp



## Current Development

- Natural digestible version
- Hemp will be molded into strands
- Current machines will knit strands into netting
- Hemp oil coating



## Target Consumer

John

- Wants to reduce time spent feeding cattle
- Has second a second job
- Willing to pay for proven product



## Next Step

- Two machines would be ideal for start up.
- It would take 4.6 years to reach 1 million target revenue
- In order to do this \$100,000 is needed to purchase them

## Question #1

It's not clear -- it says the strands are coated with hemp oil --  
but are the strands made of 100% hemp too?

ANSWER: Yes, the hemp plant has fibrous stalks, which are great for weaving into cloth or in this case netting.

## Question # 2

How easy is it for the cow to bite through the netting - if it has to be strong enough to withstand moving - how can a cow bite through it without hurting their mouth?

ANSWER: This mimics the idea that 'many hands make light work'. When pressure from the bale is placed over the full amount of net wrap all the hemp strands work together to hold it. However, the tensile strength is low enough when pressure is applied to only a few strands, like when a cow eats, it will tear. The hemp fiber will be less abrasive than other feedstuffs, including corn stalks, that cattle routinely consume.

## Question #3

How is the netting made - extruded or woven or \_\_\_\_\_?

ANSWER: Stalks of the hemp plant will be extruded into fiber. These fibers are then spun together to produce a continuous thread that can be woven into a netting. Knitting machines will be used to make the netting.