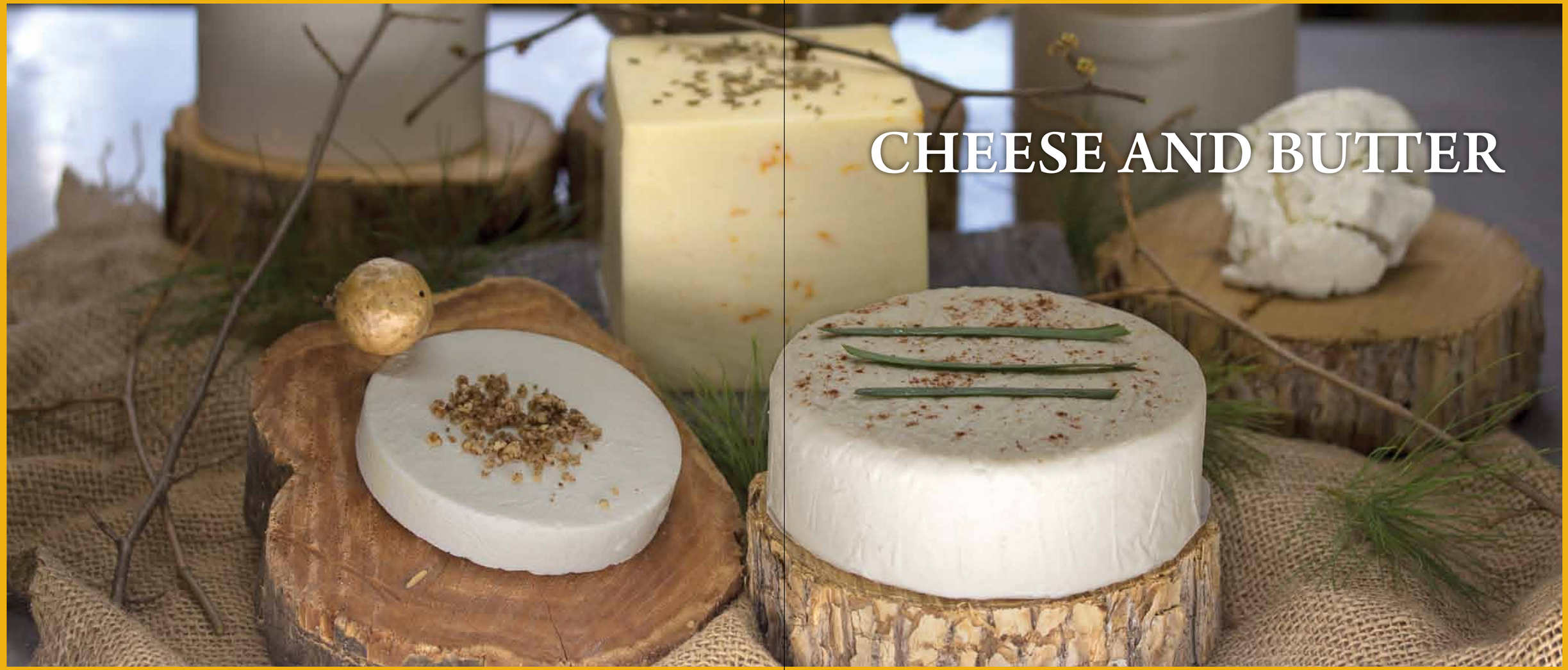
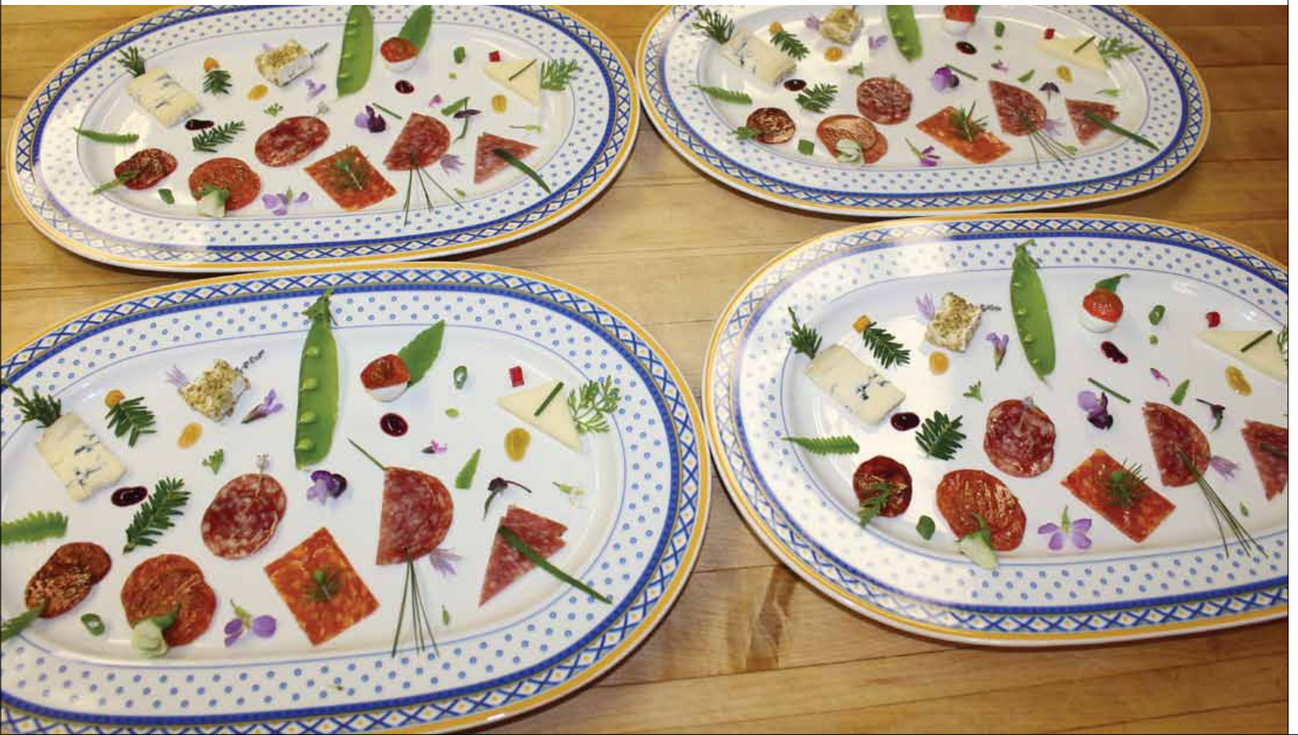


CHEESE AND BUTTER

Butter and cheese were originally developed as a way to preserve the fat in the highly perishable milk of cows, sheep, and goats and provide sustenance and nourishment throughout the year.

I think of my own homemade butters and cheeses as a way to preserve the constant supply of milks that cows, sheep, and goats provide me. The variations in color, texture, and flavor in these milks embody what's growing in the fields and pastures where the animals graze and ensure each butter and cheese I make will be unique, its very own vintage.

I make very small batches of butters each day for my guests to enjoy with the breads I bake from my own, one-of-a-kind milled flours, and I make over three dozen varieties of cheese. I also age some of the butters to add a unique flavor, just as I do with certain cheeses.



MAKING YOUR OWN CHEESES

You're probably wondering why a chef who, on principle, doesn't incorporate any butter or cream into his preparations would devote a section of his book to homemade cheese. Frankly, I was intrigued with the mystery of cheese: How could what is basically curdled milk take on a form that is not only alive, but changes and evolves as it develops. That's the reason I've been creating my own fresh and aged cheeses for years.

When I started making cheese in the 1980s, not much in the way of hand-crafted cheese was being produced in this country. To find artisanal cheese, you had to look across the pond. So I felt it was important to include my own homemade cheeses in the ever-expanding Native Harvest tasting menus.

I started by teaching myself to make one cheese. It was fun flying blind and moving forward mostly by trial and error. With each batch, I learned a little more, and began to understand what it would take to make delicious cheese. My cheese didn't have to fit into a conventional category, and it didn't need to have consistent color, texture, or flavor from batch to batch.

Cheese makers who have dined at the restaurant have mentioned that one of their greatest challenges in producing a certain cheese is that their customers expect the cheese to be exactly the same every time they purchase it. But when you're dealing with nature—specifically the ever-changing natural diet of cows, sheep, and goats—consistency is not something that you can expect. What I've chosen to embrace and celebrate in my cheese making is the constant variation in what nature provides from day to day, month to month, season to season.

In early spring, milk can be bright white and have mild, wild onion-grass overtones. That onion-grass flavor may be gone the following week, and the white replaced by an almost violet hue. What causes this change? Perhaps it's that the cows are eating the wild violets growing around the edges of the fields.

Then, in a mid-to-late summer week, the milk may take on a deep golden tone—possibly capturing the colors of the black-eyed Susans and other wild flowers that are growing in the fields. Any cheeses I start that week will have that same beautiful golden color.

Little by little, one at a time, I've built an assortment of my own fresh and aged cheeses. I even produce the acid or rennet necessary to make the cheeses from native or cultivated ingredients found on the property. Ever heard anywhere else of a Carrot Top Hay Cheese? How about a Sycamore Sap Vinegar Cheese? I'm betting you won't find a Fermented Cauliflower Juice Cheese Rolled in Maple Leaf Ashes in a cheese shop anytime soon.

I like to present my cheeses at several points in the tasting menu. Towards the beginning, I sometimes offer three or four tiny tastes of my milder cheeses with some very rare native plants or with plant powders, herbs, pickled native fruits, or plant or leaf ashes. I often compose each cheese plate with a variety of my own pine needle-cured meats, dried sausages, and jerky. This course alone may offer nearly two dozen tastes to savor.

At other times, I offer a selection of my cheeses towards the end of the menu. What better way to end a five-hour meal than with a combination of cheeses and my homegrown fruits accompanied by dandelion flour flat breads or clover and acorn flour breads? The fresh fruit offerings change from week to week and month to month, as do the cheeses and breads.

During the harsh winter months, enjoying preserved fruits with these cheeses is especially satisfying. It evokes seasons passed, and seasons yet to come. Whether it's a perfectly dried apricot or peach, or cow cheese with the golden color created seven months earlier when the wild flowers were in the field, sharing the memories of these preparations with my guests makes for an extra special dining experience.

WARNING! Creating homemade cheese is quite simple, providing you take certain precautions to ensure cleanliness. Everything that comes in contact with your cheese during the preparation process—spoons, spatulas, pots and pans, bowls, gloves, trays, racks, molds, and plates must be sterilized. I can't emphasize this enough. If anything not sterilized, including your hands, comes in contact with your ingredients, the mixture is likely to become rancid and could make you ill.

FRESH SOFT CHEESES

This fresh goat cheese preparation will yield a mellow, creamy cheese with a ricotta-like consistency that you can modify and personalize by adding your favorite herbs and powders or fresh or preserved ingredients. Fresh goat cheese is great on its own or as part of a dip for native plants or vegetables. You can also use this cheese in conventional cooked preparations where a ricotta-like cheese is required. No special equipment is needed except a thermometer to measure the temperature of the milk.

You use the acid in vinegar to curdle the goat's milk, but you'll want to add as little vinegar as possible to avoid a cheese that has an overly acidic or sour taste.

Fresh Goat Cheese

Yield: 1½ to 2 pounds

1 gallon whole goat's milk (lightly pasteurized or unpasteurized)

¼ cup vinegar (white, red, or cider)

Salt to taste and preserve, about 1 to 2 teaspoons

Fresh or dried herbs or powders (optional)

Step 1 In a large sterilized pot, slowly and gently heat the goat's milk to 200 degrees, stirring with a sterilized spatula to ensure milk does not scorch or boil.

Step 2 When milk is heated, slowly add vinegar in small increments until curds separate from the whey, or liquid. The closer the milk temperature is to 200 degrees, the less vinegar you will need to use.

Step 3 With a sterilized slotted ladle or spoon, transfer the curds into a sterilized colander lined with several layers of cheesecloth. Let the curds drain and dry for about 10 minutes. The longer you drain and dry the cheese, the firmer it will get. Don't over-dry.

Step 4 Transfer cheese from the colander to sterilized bowls or containers with covers. Sprinkle with salt. Add fresh or dried herbs or powders to create several varieties to enjoy along with the plain version. Cover and refrigerate.

When kept covered in refrigerator, cheese will last two to three weeks.

You can make several other cheeses using the same basic techniques that you follow in making fresh goat cheese, including natural buttermilk cheese, vinegar cheese, lemon verbena cheese, and whey cheese. Yet each of these is distinctive in taste and consistency because of the varied ingredients and small differences in the preparation process.

As you begin making these fresh cheeses, you'll want to keep a few things in mind.

- In the recipes where vinegar is added, the goal is always to use as little vinegar as possible to achieve the best flavor and color.
- While I encourage you to create your own vinegar, it's not essential for creating these cheeses since the vinegar is used to curdle the milk, not flavor it.
- You'll also want to prevent the milk from boiling. To do that, always heat it slowly and gently. If the milk boils, the cheese may have a cooked flavor.

VINEGAR CHEESE

Vinegar cheese uses the acid in the vinegar to curdle the milk as goat cheese does. What makes this cheese special is that it's firm and doesn't melt when it's heated, so you can use it in preparations where you want the cheese to maintain its firm consistency, such as in cold or warm salads or as an accompaniment to vegetable and meat dishes. It also has a very mild flavor, though it will take on the flavor of the other ingredients in a preparation.

WHEY CHEESE

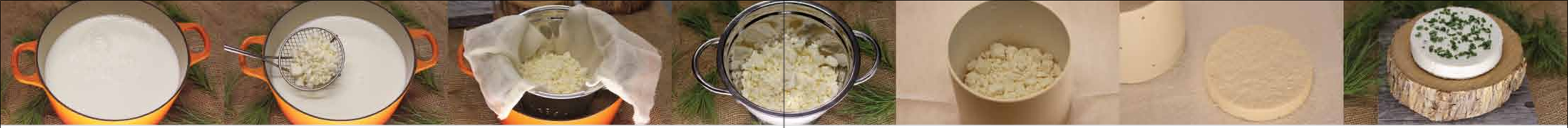
Whey cheese is made from the liquid released from the cheese curds that are created when milk is being heated and still contains some delicious butterfat. Because whey spoils quickly, the key is to use this liquid while it's very fresh, within a few hours of making the cheese that created it.

NATURAL BUTTERMILK CHEESE

Natural buttermilk cheese is made from the liquid that remains when you churn butter, and it's already very close to being a cheese when the preparation begins. You can create a mellow cheese, but if you prefer one that's slightly more sour, you can leave the buttermilk at room temperature—68 to 74 degrees—for as little as 8 or up to 36 hours before starting the recipe.

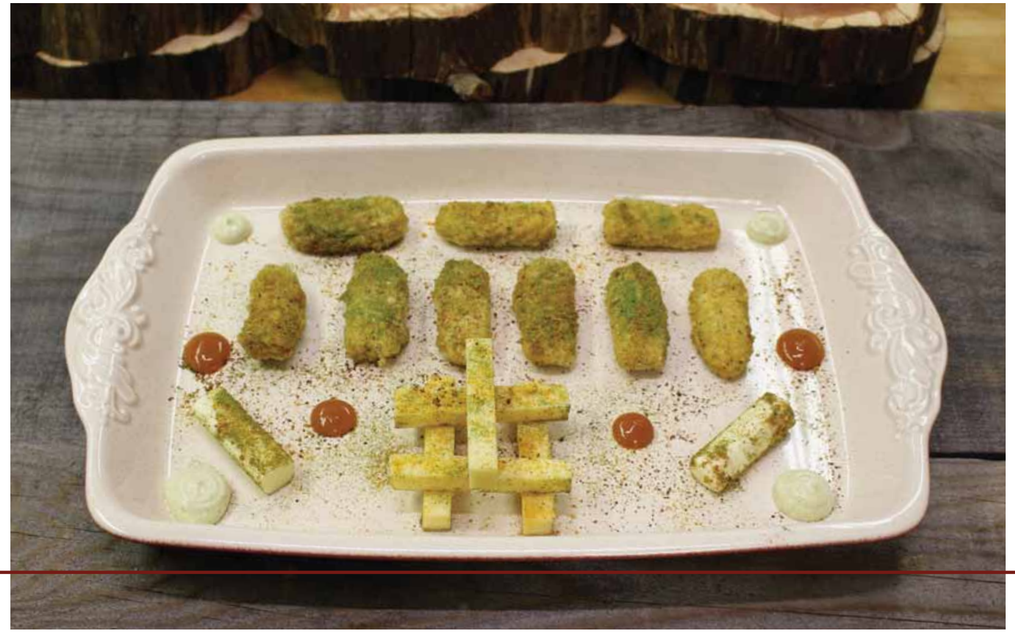
LEMON VERBENA CHEESE

Lemon verbena cheese gets its distinctive character from the leaves of lemon verbena plants. They have an amazingly powerful, aromatic lemon scent and bitter lemon flavor. It's the acid from their juice that essentially curdles the milk and creates the cheese curds.



Cheese Making Chart

	STEP 1: HEATING THE MILK	STEP 2: ADDING ACID	STEP 3: DRAINING	STEP 4: SALTING AND STORING	SHELF LIFE
	In a large sterilized pot, slowly and gently heat the milk between 170 to 200 degrees, stirring with a sterilized spatula to ensure milk does not scorch or boil. Cheese curds will form and separate from the whey. You may need to increase the temperature in small increments to help the curds form.	When milk is heated, slowly add the acid in small increments until the curds separate from the whey (liquid). The closer the milk temperature is to 200 degrees, the less acid you will need to use, producing an enhanced flavor and color.	Pour or ladle the curds into a sterilized colander lined with 2 to 3 layers of cheese cloth. Let curds drain and dry. Gently tie together the corners of the cheese cloth and hang the cheese to drain. The longer you drain and dry the cheese, the firmer it will get. Don't over-dry.	Transfer cheese from the cheese cloth to sterilized covered container(s). Add salt to taste and to preserve. Consider dividing the cheese into several bowls, salting one and infusing the others with your choice of optional ingredients like dried herbs or powders.	When kept covered in refrigerator, cheese will last for two to three weeks.
FRESH GOAT CHEESE Yield 1½ to 2 pounds	**1 gallon whole goat's milk** (unpasteurized or pasteurized) 190 to 200°, stirring constantly	**¼ cup vinegar** (any type such as white wine, red wine, or apple cider)	Ladle with a sterilized slotted ladle or spoon. Drain in colander for 10 minutes. You do not need to tie and hang this cheese.	Salt to taste Fresh or dried herbs, or plant powders (optional)	2 to 3 weeks
VINEGAR CHEESE Yield 1½ to 2 pounds	**1 gallon whole milk** (unpasteurized or pasteurized) 190 to 200°, stirring constantly	**¼ cup vinegar** (any type such as white wine, red wine, or apple cider)	Pour the curds. Drain hanging for 1 to 3 hours.	There are no seasonings to this cheese	2 to 3 weeks
WHEY CHEESE Yield 8 to 12 ounces	**1½ to 2 gallons of very fresh whey** (no more than several hours old) 190 to 200°, stirring constantly	**¼ cup vinegar** (white, red, or apple cider)	Ladle with a sterilized slotted ladle or spoon. Drain hanging for 1 to 2 hours.	Salt to taste Fresh or dried herbs, or plant powders (optional)	1 to 2 weeks
NATURAL BUTTERMILK CHEESE Yield 1 to 1½ pounds	**1 gallon fresh buttermilk** left over from butter making 170°, stirring occasionally	There is no acid added to this cheese.	Pour the curds. Drain hanging for 3 to 6 hours.	Salt to taste Honey, syrups, fresh or dried herbs, plant powders, nut or seed oils (optional)	2 to 3 weeks
LEMON VERBENA CHEESE Yield about 1 pound	**½ gallon whole milk** (unpasteurized or pasteurized) 180 to 200°, stirring constantly	**¼ to ⅓ cup lemon verbena juice** (from juicing fresh lemon verbena leaves, or substitute fresh squeezed citrus) Add ½ of the juice. Turn off heat and stir. Cover pot and let set for 10 to15 minutes. Check if milk has set and curds have formed. If not, add more lemon verbena juice until set.	Pour the curds. Drain hanging for 1½ to 2 hours.	Salt to taste Fresh or dried herbs, or plant powders (optional)	2 to 3 weeks



Cheese Sticks

I make my own vinegar cheese sticks drizzled with a touch of the homemade vinegar I use in the preparation. I roll the finished cheese into sticks and coat the pieces with fresh herbs or ground native seeds or nuts before searing on a hot stone or grilling over wood. I serve the cheese with homemade bread or crackers. Fresh or dried fruits make a great accompaniment. I also stuff a small ball of the cheese inside a ground lamb or duck meatball for a hidden surprise!

HARD CHEESES

My adventures in cheese making have been highlighted by creating my own coagulants—the ingredient needed to curdle the milk—from native and cultivated plants, roots, and even tree barks. A juice made from wild stinging nettles naturally curdles the milk. The bright colored flowers of wild bull thistle, burdock, or even artichoke also have a coagulating effect. And if you think dried carrot tops, fermented maple sap, fig tree bark shavings, or certain cabbage flowers can't make great cheeses, you'd be wrong!

I also create my own natural food colorings from native and cultivated plants, including fresh and dried marigold, nasturtium, sunflower, and wild bergamot flower petals as well as leftover shallot and onion peels. These natural ingredients result in offerings that are not only visually unique but provide a continually evolving flavor and texture profile.

Normally, making an aged cheese that you'll eventually be able to grate requires special equipment. So I want to introduce you to the world of preparing hard, aged grating cheeses using normal kitchen equipment. The only special equipment you'll need is a thermometer to measure the temperature of the milk.

This cheese can be enjoyed at all stages of curing but will really become interesting after three to four weeks.

Stinging Nettle-Marigold Hard Cheese

Yield: ½ to ¾ pound

1 gallon whole cow's milk (unpasteurized or lightly pasteurized)

¼ cup fresh stinging nettle juice or 1 cup crushed fresh stinging nettle leaves and stems. If nettles are not available, replace nettle juice with 1 teaspoon of citric acid dissolved in ¼ cup cold water.

1 tablespoon dried marigold flower petals or ¼ cup fresh marigold petals

Salt to taste and preserve, about 1 to 2 teaspoons plus more to coat and wash

2 tablespoons fresh cream

Step 1 Add nettle juice or crushed nettles to milk and mix in (or substitute citric acid and water solution).

Step 2 In large sterilized pot, gently and slowly heat milk to 190 degrees, making sure to prevent it from boiling and scorching by stirring often with a sterilized spatula.

Step 3 As curds and whey begin to separate, stir in marigold petals and remove from heat. Let set untouched for 15 to 20 minutes to let the marigold color steep in.

Step 4 Using a sterilized slotted spoon or ladle, gently transfer curds to a sterilized colander lined with 2 to 3 layers of cheesecloth. Tie the cheesecloth ends together gently and hang to drain and dry for 30 to 60 minutes.

Step 5 Remove cheese from cheesecloth and place in sterilized bowl. Stir in cream and salt to taste.

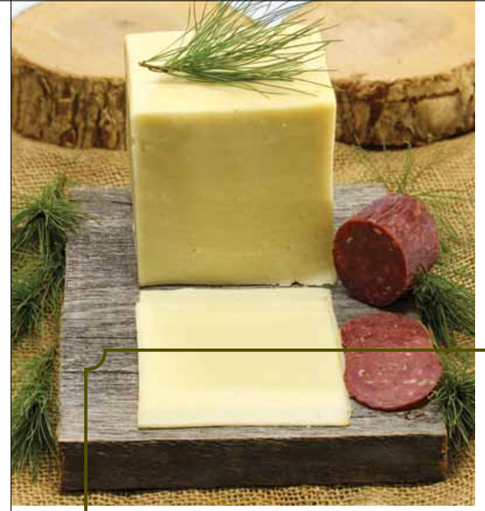
Step 6 Press cheese evenly into a proper-sized custom mold* with trimmed lid, apply a weight, such as a mug or glass, and press for 1 to 1½ hours to extract moisture. Remove cheese from the mold, turn it over, replace in the mold, and press for another 10 to 12 hours.

Step 7 Remove the cheese from the mold. Using damp cheesecloth, gently rub all sides with a little salt. Return to mold, place mold in sterilized bowl or container, cover, and refrigerate.

Step 8 Turn the cheese in the mold and rub with salt every day for 7 to 10 days, making sure to rub off any mold with cheesecloth dipped in salted water.

Step 8 Age cheese in refrigerator for 3 to 6 weeks, checking often for mold and excess moisture. The cheese can be enjoyed anytime but usually won't grate well for about 4 weeks. When fully cured, use this cheese as you would an aged Parmesan or Romano.

* A perfect mold could be a small, sterilized square or rectangular plastic food storage container with quarter inch holes poked through one inch apart on all sides and bottom for drainage. Trim lid (and poke holes) so it will fit inside the container on top of cheese. This allows you to gently apply a weight to extract moisture.



Another way to use fresh whey, a byproduct of cheese making, and a recipe that's fun to make, is the Native Harvest version of American cheese.

The process is similar to producing maple syrup, as it involves evaporating and concentrating the very fresh whey (instead of fresh maple sap) to about 20% of its original volume. Since it can take five to ten hours, I sometimes do the boiling and concentrating outdoors in late winter or early spring right next to the various tree saps I'm concentrating over a wood fire. The aroma of the boiling saps and whey fill the air. Since there's a lot of time involved, I make it an event!

Whey American Cheese

Yield: 1 to 1 ½ pounds

2 gallons very fresh whey (no more than a few hours old) from cow, sheep, or goat's milk

1 to 2 cups whole milk or heavy cream (optional)

Step 1 In a large sterilized pot, add whey and bring to a simmering boil (not a rapid boil). As whey begins to boil, a foam will begin to develop on the surface. Skim foam off with a sterilized ladle or spoon and reserve in sterilized bowl in refrigerator—do not discard foam!

Step 2 Let whey gently simmer and evaporate uncovered until reduced in volume by 70% to 80%. This could take 5 to 10 hours. When whey begins to thicken, begin stirring often to prevent sticking while adding the reserved foam back to the pot. If desired, you can add 1 to 2 cups of fresh cream or milk at this stage.

Step 3 After stirring for 15 to 20 minutes, transfer a small batch of simmering whey to a blender, blend for 2 to 3 minutes, and empty into a clean pot. Repeat until all the liquid has been blended.

TIP *Place a cloth over the blender as the hot whey will create steam and tend to pop the lid off the blender, creating a burning whey-spray mess.*

Step 4 After all whey is blended, return the liquid to a simmer, concentrating and thickening over low heat, stirring constantly. When whey reaches a thick, almost mashed potato-like consistency, place entire pot in a cold-water bath. Stir constantly until cool enough to pour into a small loaf pan or other mold lined with plastic wrap. If you plan to add chopped seeds or nuts, fold them in evenly before pouring into the mold.

Step 5 When completely cooled, remove cheese from mold, wrap in cheesecloth before storing in covered container in the refrigerator. On its own, this is a perfect cheese for slicing.

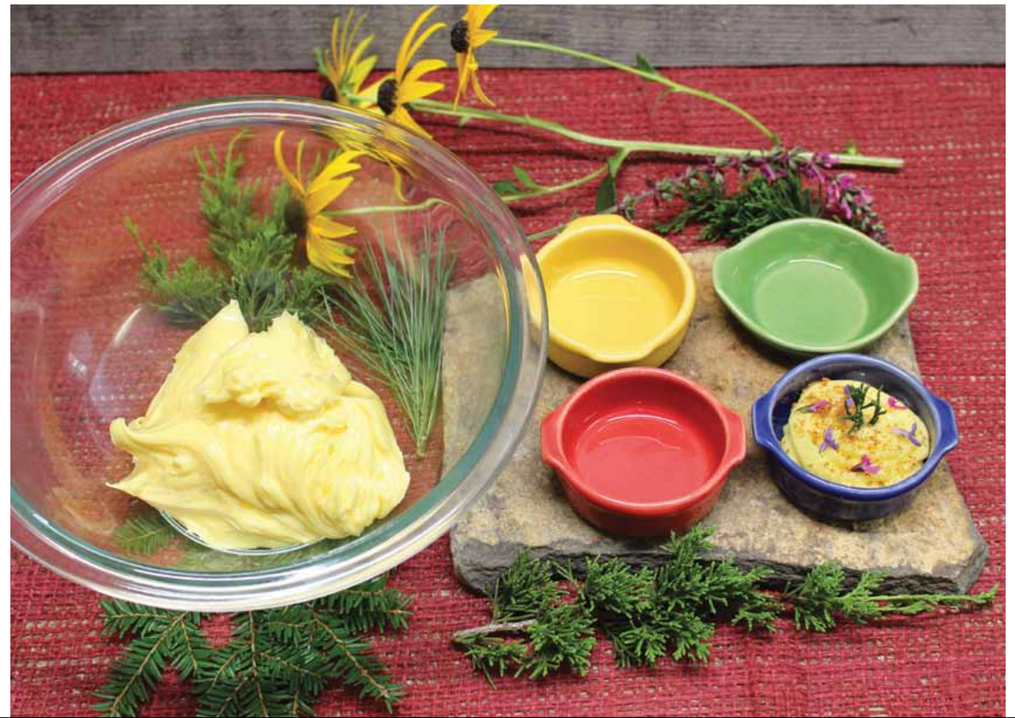
Refrigerated, cheese will keep for six to eight weeks.

CREATING YOUR OWN BUTTER

Although I don't use any dairy products in my Native Harvest preparations, I've always made my own fresh and aged butters to enjoy with the many breads I create from unique home-made flours.

WARNING! Creating homemade butter is quite simple, provided you take the same precautions to ensure cleanliness that apply to making cheese. Everything that comes in contact with the butter should be sterilized. Otherwise, the butter is likely to turn rancid and it could make you ill.

Fresh butter with a little wild ramp or onion powder or asparagus powder added can capture the essence of spring. A powder made from sweet peas or carrots will turn butter a bright shade of green or orange. Have a ton of dandelions flowers you don't know what to do with? Make a powder and add it to some fresh butter. The same goes for nasturtiums. When adding powders, though, keep in mind a little goes a long way. You can always add a little more, but once it's been added, it's impossible to take out.



Basic Sweet Cream Butter

Yield: 7 to 9 ounces

1 pint + 3 tablespoons heavy cow, sheep, or goat's cream (unpasteurized or pasteurized but not ultra pasteurized)

1 to 1½ cups non-chlorinated cold water

Sea or non-iodized flake salt, plant or vegetable powder you've prepared, or a combination

Step 1 Let the cream ripen at room temperature (68 to 74 degrees) for 3 to 6 hours.

Step 2 Separate the buttermilk liquid from the solids in the cream by pouring cream into a 1 quart sterilized jar and screwing the lid on firmly. Shake jar for 5 to 8 minutes or until butter has formed and liquid buttermilk becomes visible. (If you have one, you can use a standing mixer fitted with a paddle instead of the jar.)

Step 3 Open the jar, pour off liquid buttermilk, and save for another use, such as buttermilk cheese. Using a sterilized spatula, transfer butter solids to a sterilized bowl.

Step 4 Add about ⅓ of the cold water to the butter. With a sterilized spatula or spoon, press water into butter to wash out remaining buttermilk. Pour off excess liquid and repeat several more times, removing buttermilk until liquid you're pressing out runs clear. It can take 3 to 5 presses to remove all buttermilk. This step is very important since if buttermilk remains the butter will spoil and turn rancid.

Step 5 If you want salted butter, mix in salt to taste, about 1 teaspoon. Salt will also help preserve the butter and increase its shelf life. You can also add powders to create one-of-kind flavored butters. Enjoy right away or refrigerate for a few hours to let the powders infuse.

Your butter will last seven to ten days refrigerated, but will typically be eaten before then.

TIP *If the butter has a cheese-like flavor, you've probably ripened the cream a bit too long, causing it to become overly acidic.*

TIP *If the butter is not forming and buttermilk is not appearing during the jar shaking, you probably have not ripened the cream enough. Warming the cream a bit will raise the acidity level and enable the butter to form.*

TIP *If the butter has a rancid odor, you've either not removed all of the buttermilk or used an unsterilized piece of equipment. Discard butter, sterilize all equipment, and try again.*

TIP *Remember, creating your own butter is as much about sight, feel, and taste as it is about following the instructions.*