MeadowSweet FARM

Fresh Stone Milled Flour

From berry to beautiful bake

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This handbook follows seven short chapters. Read it straight through the first time, then keep it near the mill. The last pages are a quick-reference you can glance at mid-bake.

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HOW TO USE THIS GUIDE

Bake by weight whenever you can. Freshly stone milled flour is livelier than bagged flour, so treat printed cup measures as a starting point, not a law. Watch the dough, not the clock.

CHAPTER ONE

The Basics of Fresh Stone Milled Flour

What it is, why it tastes different, and the health benefits you can't get from store-bought.

What freshly stone milled flour actually is

A wheat berry is a complete seed. It has three parts: the bran (the protective outer coat), the germ (the living embryo), and the endosperm (the starchy middle that feeds the seedling). When those berries are stone milled, every part goes into the bowl. That is whole-grain flour in the most literal sense — ground minutes or hours before you bake, not weeks or months.

Stone milling is different from industrial roller milling. The berries pass between millstones that crush the whole kernel together, so bran, germ, and endosperm stay in their natural proportion. A well-set stone mill also runs cooler than high-speed steel rollers, which helps protect the oils and vitamins in the germ. What you get is freshly stone milled flour: the entire grain, recently ground.

Most grocery-store white flour is something else entirely. Commercial roller mills strip away the bran and the germ so the remaining endosperm can sit on a shelf for a year without going rancid. What is left is mostly starch and a portion of the grain's protein. Even many bags labeled “whole wheat” have been heat-treated or aged so the oils in the germ stay stable. That stability is useful for warehouses. It is not useful for flavor, enzymes, or the vitamins that live in the germ.

Why it tastes different

Freshly stone milled flour tastes like the grain it came from. Hard red wheat is nutty and a little tannic, the way a good whole-wheat loaf should taste. Hard white wheat is milder and faintly sweet. Soft white wheat is delicate. Kamut is buttery. Those notes fade as the flour oxidizes. The peak window is roughly the first 24 to 72 hours after milling, when the aromatic oils in the germ are still bright.

Store-bought whole wheat often tastes flat or bitter by comparison. That bitterness is not “how wheat tastes.” It is what wheat tastes like after the germ oils have gone stale. Freshly stone milled flour also carries more natural sugars because the grain's own enzymes (especially amylase) are still active. Those enzymes nibble starch into simple sugars that yeast and sourdough can use — and that your palate reads as sweetness rather than cardboard.

The health benefits bagged flour can't match

The nutritional argument for freshly stone milled flour is mostly the argument for eating the whole grain, then keeping that grain from oxidizing on a warehouse shelf. When bran and germ stay in the flour, you keep:

- Fiber — typically three to four times the fiber of white flour, from the bran. Fiber slows digestion, steadies blood sugar, and feeds the gut.

- Vitamin E and healthy fats — concentrated in the germ. These are the first things commercial mills remove, because they shorten shelf life.
- B vitamins — thiamin, niacin, B6, and folate live in bran and germ. Enrichment puts a few synthetic versions back into white flour; it does not restore the original package.
- Minerals — magnesium, zinc, iron, phosphorus, and selenium travel with the outer layers of the kernel.
- Antioxidants and phytonutrients — phenolic compounds in the bran that do not survive refining.
- Active enzymes — useful in fermentation, and part of why many bakers find long-fermented freshly stone milled bread easier to digest than a quick commercial loaf.

Two honest caveats. First, "freshly stone milled" is not a magic vitamin pill. The big leap is whole grain versus refined grain. Freshness matters because those germ oils go rancid and because flavor and enzyme activity decline — not because every nutrient vanishes in 24 hours. Second, freshly stone milled wheat still contains gluten. It is not a treatment for celiac disease. Some people who feel better on freshly stone milled flour are reacting to the absence of bleaching agents, dough conditioners, and stale oils, or to the effect of long fermentation, not to a different kind of gluten.

STORAGE, IN ONE SENTENCE

Mill what you will bake this week. Keep extra freshly stone milled flour airtight in the refrigerator for 1–2 weeks, or in the freezer for several months. Wheat berries themselves keep for years in a cool, dry, dark place — so store the grain, not the flour, whenever you can.

CHAPTER TWO

The Grains You'll Fall in Love With

Hard red, hard white, and soft white wheat, ancient Kamut — and how to use each one.

Wheat is not one ingredient. Hardness tells you about protein and gluten strength. Color tells you about bran flavor. Season (winter vs. spring) shifts protein a little. Learn four grains well and you can bake almost anything without buying a dozen specialty bags.

Hard red winter wheat

This is the workhorse of the American Great Plains and the flavor most people mean when they say “whole wheat.” The bran is reddish-brown and a touch bitter-tannic in a pleasant, bread-crust way. Protein typically lands around 11–13 percent, with gluten strong enough to hold a sandwich loaf, a hearth boule, or pizza dough.

Use it for: everyday sandwich bread, rustic loaves, rolls, pizza, cinnamon swirl bread, and any bake where you want a classic wheat backbone. It also makes excellent tortillas and flatbreads.

Watch-outs: the bran flavor can dominate delicate cakes and pale sandwich bread. If a family member is used to white bread, start by blending hard red with hard white rather than going 100 percent red on day one.

Hard white winter wheat

Think of this as hard red's milder cousin. Protein and gluten strength are in the same neighborhood, so it still builds bread. The bran is tan rather than russet, so loaves bake up lighter in color and the flavor is sweeter, less tannic. Many bakers who “don't like whole wheat” change their mind on hard white.

Use it for: sandwich bread that still looks friendly, dinner rolls, cinnamon rolls, hamburger buns, light whole-wheat pancakes, and blends. It is the closest whole-grain stand-in for all-purpose flour when you want lift and a mild taste.

Watch-outs: because the flavor is quieter, a poorly fermented loaf has less character to hide behind. Give it time and salt; don't underseason.

Soft white wheat

Soft wheat is lower in protein — often 8–10 percent — with gluten that is tender rather than elastic. That is a gift, not a defect. You want weak gluten in cakes, cookies, biscuits, pie crust, muffins, scones, and pancakes. Soft white also mills into a finer, silkier flour that disappears into batter instead of leaving a sandy bran bite.

Use it for: pastry, cookies, quick breads, muffins, pancakes, waffles, biscuits, pie dough, crackers, and tender sandwich slices when blended with a hard wheat. A 50/50 hard-white and soft-white blend is a superb homemade all-purpose.

Watch-outs: do not expect a high-rising rustic loaf from 100 percent soft wheat. It hasn't the gluten for it. If a bread recipe calls for bread flour and you only have soft white, blend in hard wheat or accept a tighter, cake-like crumb.

Kamut (Khorasan wheat)

Kamut is the trademarked name for organically grown Khorasan, an ancient relative of durum. The berries are noticeably larger and a rich amber-gold. Flavor is the reason people fall for it: buttery, slightly sweet, almost corn-like. Protein is often high (commonly mid-teens), but the gluten is extensible rather than bouncy — great for pasta and handsome loaves, a little less springy than modern hard red.

Use it for: bread (especially blended 30–70 percent with hard wheat), pasta, pizza, muffins, and any bake where you want a golden crumb and a rich flavor. It makes remarkable pancakes.

Watch-outs: hydration can surprise you; start a little lower than hard red and add water as the dough relaxes. Some bakers with non-celiac wheat sensitivity prefer it, but it is still wheat. It is not gluten-free.

Grain at a glance

Grain	Protein feel	Flavor	Best uses
Hard red winter	Strong gluten, 11–13%	Nutty, robust, classic wheat	Bread, pizza, rolls, hearty bakes
Hard white winter	Strong gluten, 11–13%	Mild, sweet, light bran	Sandwich bread, buns, everyday loaves
Soft white	Tender gluten, 8–10%	Delicate, low bitterness	Pastry, cakes, cookies, pancakes
Kamut / Khorasan	High protein, extensible	Buttery, golden, rich	Bread blends, pasta, pizza, muffins

Protein percentages vary by harvest, farm, and year. Bake by feel, not by a single number on a bag.

A SIMPLE HOME "FLOUR PANTRY"

If you keep only three berries on the shelf, keep hard white (daily bread), soft white (tender bakes), and one character grain — hard red or Kamut — for flavor. Blend them. That is how professional mills build all-purpose flour; you can do the same by the jar.

CHAPTER THREE

How Fresh Stone Milled Flour Acts in Baking

Why your dough feels different and how to work with it successfully.

It is thirstier than bagged flour

Bran is a sponge. The germ adds oils and a little more surface area. Intact starches have not been pre-oxidized. Together they mean freshly stone milled whole-grain flour typically drinks 5 to 15 percent more water than the same weight of commercial all-purpose or even aged whole wheat. Hard wheat drinks more than soft wheat.

If you copy a bagged-flour recipe 1:1 by volume and stop there, the dough often feels stiff, tears when you stretch it, and bakes into a tight, dry crumb. The flour was not the problem. The water was.

A practical starting adjustment: add about 1 to 2 extra tablespoons of liquid per cup of freshly stone milled flour (roughly 5–10 percent more hydration by weight), then decide after a rest whether it wants more. Dough that looks a little shaggy at minute two often looks perfect at minute twenty, once the bran has caught up.

It keeps absorbing after you mix

Commercial flour has already had days or weeks to take on and then lose moisture. Freshly stone milled flour is still settling. Expect the dough to feel wetter right after mixing and then tighten as bran hydrates over 20 to 60 minutes. That is why an autolyse — mixing just flour and water and walking away — is the single most useful habit in freshly stone milled baking. Bran softens. Gluten begins to organize itself without you fighting it. Sharp bran edges do less damage to the gluten net once they are wet and swollen.

Gluten develops, but it needs help

Two things work against a lofty loaf. First, bran particles act like tiny shards that nick gluten strands as you mix. Second, freshly stone milled flour has not gone through the oxidation that strengthens gluten in aged flour. The result is dough that can feel slack or shreddy if you treat it like white bread dough.

The fix is not “knead forever.” The fix is time plus gentle structure-building:

- Autolyse 20–40 minutes (flour + water only) before salt and leaven go in.
- Use stretch-and-folds instead of a long slap-and-tear knead. Three to five sets over the first 90 minutes is plenty for most breads.
- Keep hydration high enough that the dough can move. Dry whole-grain dough cannot develop gluten; it just tears.
- Grind as finely as your mill allows for sandwich bread. A coarser grind is lovely in rustic loaves and porridge breads; it is harder on rise.

It ferments like it is alive — because it is

Freshly stone milled flour still has active amylase and protease. Amylase feeds your yeast or starter extra sugar, so bulk fermentation often runs faster than the same recipe with aged flour. Protease nips at gluten over a long ferment, which is wonderful for extensibility up to a point and destructive after that point. Watch the dough: a 20–30 percent rise may be enough on a warm day with fresh hard wheat. Clock-based schedules written for commercial white flour will overproof you.

The crumb will be different — and that is allowed

A 100 percent freshly stone milled loaf will not copy a supermarket white sandwich pullman, and it should not try. The crumb is moister, the crust is more flavorful, the slice is a little denser, and the bread stays satisfying longer. If you want more loft, sift out some of the coarsest bran after milling (you can cook that bran into porridge and fold it back in), or blend 20–30 percent sifted freshly stone milled flour or commercial bread flour into the dough while you learn.

> **THE FEEL YOU ARE AIMING FOR**
>
> Soft, slightly tacky, stretchy, and smooth after the folds — not a stiff clay ball and not soup. If you poke it and the dent springs back slowly, you are close. If it tears instead of stretching, it wants more water or more time, not more flour.

CHAPTER FOUR

Simple Swaps for Fresh Stone Milled Flour Success

Easy adjustments to make any recipe work with freshly stone milled flour.

You do not need a new cookbook. You need a short list of conversions you can apply to the recipes you already love.

Swap by weight, not by the scoop

A cup of fluffy commercial all-purpose and a cup of freshly stone milled whole wheat are not the same amount of flour. Whole-grain flour packs differently, and brands disagree about what “one cup” weighs. Weigh the original flour if the recipe gives grams. If it only gives cups, a workable home standard is about 120 grams per cup of freshly stone milled whole wheat, then adjust dough feel. Once you leave volume behind, most of the “this recipe failed” stories disappear.

The hydration bump

Start here, then tune:

- Replacing white flour with freshly stone milled hard wheat: add 10–15 percent more liquid, or 1–2 tablespoons per cup.
- Replacing white flour with freshly stone milled soft wheat: add about 5–8 percent more liquid.
- Replacing store whole wheat with freshly stone milled whole wheat: add about 5 percent more liquid.
- Cakes, muffins, and pancakes: add 1 extra tablespoon liquid per cup of flour, and do not overmix.

Hold back a splash of the extra liquid and drizzle it in after the autolyse if the dough still looks tight. It is easier to add water than to recover from a soupy mix — though freshly stone milled dough that looks too wet at the start often isn't, ten minutes later.

Match the grain to the job

The cleanest “swap” is choosing the right berry before you mill.

- Bread, pizza, bagels, cinnamon rolls: hard white, hard red, or a blend. Kamut up to about half the flour.
- Cookies, pie crust, biscuits, tender muffins: soft white, or soft white blended with a little hard white.
- Pancakes and waffles: soft white, hard white, or Kamut. These batters forgive almost everything.
- Pasta: Kamut or hard wheat, milled fine.
- Everyday “all-purpose”: 70 percent hard white + 30 percent soft white, or 50/50.

Rest is an ingredient

Build a pause into every converted recipe.

- Yeast breads: 20–40 minute autolyse, then mix in salt and yeast.
- Sourdough: same autolyse; expect a slightly shorter bulk ferment than the original recipe.
- Cookies and pie dough: chill at least 30 minutes so bran can hydrate and the fat can firm up.
- Muffins, quick breads, pancakes: mix until just combined, then let the batter sit 10 minutes before baking or griddling.
- Tortillas and crackers: rest the dough covered for 20 minutes before rolling.

Yeast, sweetener, fat, and salt

You rarely need to change these much. A few small knobs help:

- Yeast: if the original recipe is a quick one-rise loaf, consider a slightly longer rise rather than more yeast. Freshly stone milled flour already ferments eagerly.
- Sugar or honey: whole-grain loaves often taste better with a teaspoon or two of honey, molasses, or maple — not for lift, for balance against bran.
- Fat: a tablespoon of oil or butter in sandwich bread softens the bran's edge and keeps slices flexible the next day.
- Salt: stay at 1.8–2.2 percent of flour weight. Under-salted whole wheat tastes muddy.
- Leaveners in quick breads: keep the original baking powder / soda amounts. If a muffin turns out squat, the issue is usually hydration or overmixing, not the leavener.

A one-page conversion card

Original recipe uses	Freshly stone milled swap	First adjustment
All-purpose flour	70% hard white + 30% soft white	+1–2 Tbsp liquid / cup; rest 20 min
Bread flour	Hard white or hard red	+10–15% water; autolyse; folds
Store whole wheat	Same class of wheat, freshly stone milled	+5% water; shorter ferment watch
Pastry or cake flour	Soft white, milled fine	+1 Tbsp liquid / cup; don't overmix
50/50 white + wheat	Hard white, unsifted	Small hydration bump; expect more flavor

SIFTING, WITHOUT SHAME

If you want a lighter sandwich loaf while you learn, mill as usual, then sift once through a medium mesh. Bake with the finer flour. Cook the leftover bran in milk or water for five minutes and stir that porridge back into the dough — you keep the nutrition and lose some of the grit. This is how many bakeries make “high extraction” bread.

CHAPTER FIVE

Working with Fresh Stone Milled Flour Dough

Troubleshooting dense bread, sticky dough, and other common challenges.

Almost every freshly stone milled problem is one of four things: not enough water, not enough time for the bran, not enough structure, or too much fermentation. Walk through the symptom, then change only one variable at a time.

Dense bread

What you see: a squat loaf, tight crumb, heavy slice, little oven spring.

Likely causes and fixes:

- Dough was too dry. Next bake, add 10–20 grams of water per 500 grams of flour and use folds instead of extra bench flour.
- Gluten never developed. Add an autolyse. Do three or four stretch-and-folds. Check that you used a hard wheat for a yeasted loaf.
- Bran was very coarse. Grind finer, or sift once. Coarse bran is delicious in porridge bread and punishing in a sandwich loaf.
- Underproofed. Freshly stone milled dough can look "big enough" before it is ready, or the opposite. Use the poke test: a slow-springing dent means go to the oven. A dent that vanishes instantly needs more time.
- Overproofed. Active enzymes plus a warm kitchen collapse a loaf that looked perfect an hour ago. Shorten bulk by 15–25 percent compared with white-flour schedules.
- You expected white-bread volume from 100 percent whole grain. Recalibrate. Aim for a moist, even crumb and a strong crust, then chase extra height with sifting or a 10–20 percent hard-wheat / sifted blend.

Sticky dough

Sticky is not the same as broken. Freshly stone milled whole-grain dough at a proper hydration is tacky. It should cling lightly to a dry finger and release from a wet one.

- Do not keep adding flour. That is how sticky dough becomes dense bread. Flour the bench sparingly, if at all.
- Wet your hands. Use a bench scraper as an extension of your palm.
- Give it 10 quiet minutes. Bran absorbs; stickiness often drops a full notch after a short rest.
- If it is truly slack and shiny like batter, you overshot the water. A teaspoon of flour will not save it; a set of coil folds and a longer rest in the bowl will.
- Soft wheat and Kamut run stickier than hard red. That is normal. Handle them colder if needed.

Dough that tears or won't stretch

- It is underhydrated, under-rested, or both. Sprinkle water on the dough and fold it in rather than starting over.
- You may have mixed salt and flour together with no rest; salt tightens gluten early. Next time, autolyse first.
- A very coarse grind will always tear more. Fine the mill setting.

Bitter, “off,” or rancid flavor

- The flour sat too long at room temperature. Mill closer to bake day; freeze what you will not use this week.
- Hard red's bran is naturally more tannic. Blend with hard white, add a little honey, or ferment longer (a good ferment sweetens the loaf).
- The berries themselves were old or stored warm. Freshly stone milled flour cannot rescue stale grain. Buy berries from a source that turns over inventory, and smell them: they should smell sweet and clean, never like oil paint or crayons.

Gummy crumb or a wet line at the base

- The loaf was underbaked. Whole-grain bread hides moisture. Bake to an internal temperature of about 200–205°F (93–96°C) for lean breads.
- It needed a longer cool. Cutting freshly stone milled bread too soon compresses a still-setting crumb. Wait at least an hour; two is better.
- Hydration was far too high for the grind and the bake time. Drop water 3–5 percent or extend the bake 5–8 minutes.
- In sourdough, a gummy line can mean the loaf went into the oven underproofed and the center never set. Give it more proof, not less heat.

It rose on the counter, then went flat in the oven

That is usually overproofing, a weak gluten net, or both. The enzymes in freshly stone milled flour keep working while you hesitate. Shape a little earlier than you think, give a shorter final proof, and make sure the dough had folds so it can hold gas. A screaming-hot Dutch oven or stone still matters — oven spring needs heat as well as structure.

Quick breads, cookies, and pastry problems

- Dry muffins or cookies: more liquid or another tablespoon of fat; do not bake until they look as dry as white-flour versions.
- Spread-out cookies: chill the dough longer. Bran takes time to drink. A 30–60 minute rest in the fridge changes everything.

- Tough pie crust: you used hard wheat, or you worked the dough warm. Switch to soft white and keep the fat in distinct pieces.
- Pancakes that sit like hockey pucks: batter too thick, or it sat so long the bran locked up. Thin with milk and cook a tester first.

Troubleshooting snapshot

Symptom	Try this first	Try this next
Dense loaf	Add water; autolyse	Finer grind; more folds; don't overproof
Sticky mess	Wet hands; wait 10 min	Folds in the bowl; less bench flour
Tears when shaped	More water + rest	Finer mill setting; autolyse before salt
Bitter taste	Blend in hard white	Fresher berries; a touch of honey
Gummy center	Bake hotter / longer	Cool fully; drop hydration slightly
Flat in the oven	Shape sooner	More folds; hotter baking vessel

CHAPTER SIX

Stone Milling Techniques

How the stones work, how to set them, and how to keep the flour cool and alive.

Stone milling is a single-stream grind. Two stones face each other. Grain enters at the eye, is crushed by compression, shear, and abrasion as it travels outward, and leaves as flour at the skirt. Bran, germ, and endosperm stay together. That is why freshly stone milled flour tastes and bakes differently from bagged flour — and why technique at the mill matters as much as technique at the bench.



The MeadowSweet Farm stone mill and auto-sifting unit. Grain feeds the hopper, passes between the stones, then moves into the enclosed sifter, which separates streams into the bags below.

This is a horizontal stone mill with a wooden auto-sifter attached. Berries drop from the hopper into the stones. Meal then travels into the glass-fronted sifting cabinet, where screens sort the grind into separate outlets — finer flour in one bag, coarser fractions in others — without a second handling step. That is how a single-stream stone mill can still give you a choice of extraction without sending the grain through steel rollers.

What the stones are doing

The bedstone stays still. The runner turns. The working faces are not smooth. Deep furrows grab the berries, break them, move meal outward, and pull cooling air through the gap. Flatter lands between the furrows finish the flour. Finer cuts on those lands — feathering or stitching — keep reducing particle size. Repeating sectors of that pattern are called harps.

The stones should never slam together. A slightly wider gap at the eye than at the skirt lets grain enter freely and get finished as it travels out. You do not need a miller's feeler-gauge. You do need a gap that feeds smoothly and a sound that stays loaded, not screaming.

The four levers

- Gap (aperture). Closer stones make finer flour, more damaged starch, more heat, and slower flow. Wider stones leave coarser bran flakes, run cooler, and mill faster. Use the widest setting that still gives the texture you need.
- Feed rate. Starve the mill and the stones rub each other. Flood it and berries skate through half-ground. The mill should sound even and loaded.
- Speed. Commercial stones often turn slowly; small home stones spin faster because they are smaller. Edge speed creates shear and heat. Slow and full beats fast and empty.
- Dress. Sharp furrows cut cleanly and stay cooler. A worn face slips, heats, and leaves bran slabs. If flour suddenly feels warmer or coarser at the same setting, the stones are dull.

Heat is the real enemy

Friction is the tax you pay for fineness. Poorly run stones can push flour well past 180°F. Around 118°F, glutenin begins to suffer. Germ oils oxidize. Enzymes fade. Damaged starch climbs, and dough turns slack.

Cool-milling habits: open the stones when the mill is idle. Start wide, then close in after grain is flowing. Never let empty stones kiss. Keep batches short enough that the stones stay warm, not hot. Chill berries for long runs. Prefer two moderate passes over one brutal pass on very hard grain. Feel the flour as it exits — comfortably warm is fine; hot to the touch is not.

One pass or two

- Single pass, tight. True whole-grain flour. Fast. More heat. Bran is pulverized, so it is harder to sift later.
- Single pass, medium. Cooler and faster, with flakier bran. Ideal for long-fermented bread, where water will soften those flakes.
- Two pass — coarse, then fine. Best for hard berries such as Kamut and for pastry-fine flour without cooking it. First pass cracks. Second pass finishes.

Starting settings by grain

Grain	Starting approach	Why
Hard red winter	Medium-tight, or tight for sandwich bread	Strong bran; needs enough reduction or the crumb stays sandy
Hard white winter	Medium-tight	Similar protein to hard red, milder bran
Soft white	Medium-tight to tight, lighter feed	Softer endosperm; too tight just heats it
Kamut / Khorasan	Coarse, then fine	Large, hard berries; one brutal pass runs hot

These are starting points. Listen to the mill. If stones chatter while grain is flowing, open them a hair. Rub the flour: pastry should feel almost silky; bread can keep a little speck of bran.

After the stones

Everything that went in comes out together. Then you choose how much of the stream to keep. Use it all for 100 percent extraction. Sift once through a medium mesh for high-extraction sandwich bread. Bolt finer if you want a lighter loaf, and cook the leftover bran as porridge to fold back into the dough. Do not wet-temper berries the way a roller mill does unless you know your stones and will bake immediately — extra moisture packs the gap and raises heat.

A miller's sequence

- Pick clean, dry berries. Spread them and pull stones, chaff, and metal.
- Weigh what you will bake in the next day or two.
- Open the stones fully. Turn the mill on empty.
- Close until you hear the lightest kiss, then back off one notch.
- Start the feed. The sound should go from an empty ring to a loaded hum.
- Watch the flour. Adjust the gap only while grain is moving.
- Stop before the hopper runs dry, or open the stones as the last berries pass.
- Open the gap wide to cool. Brush the stones if your mill allows it. Do not wash them.
- Bake, refrigerate, or freeze the flour. Store berries, not flour, long-term.

THE SOUND YOU ARE LISTENING FOR

Empty stones ring. Overloaded stones cough. Stone-on-stone screams. The working sound is a steady, loaded hum with a ribbon of flour that feels warm, not hot. Learn that sound on your mill and most other settings become obvious.

CHAPTER SEVEN

Best Uses and Suggested Blends

What each MeadowSweet Farm flour is for, and how to blend them.

MeadowSweet Farm mills wheat and Kamut to three grades, plus whole-grain rye. The T number is the sift. A higher number keeps more of the berry. A lower number has had more of the coarse bran taken out. All of them are freshly stone milled. None of them is commercial white flour.

- T-110, whole wheat. The full stream, or as close as the stones leave it. Most bran and germ, strongest grain flavor, thirstiest dough, deepest color.
- T-85, lightly sifted. A little of the coarsest bran removed. Still a high-extraction flour. The everyday bread flour for most bakers.
- T-65, all purpose. Sifted further. Finer, milder, easier rise and a more tender crumb. Use it when a recipe was written for bagged all-purpose or bread flour.

Blend by weight, not by the scoop. Percentages below are shares of the total flour. Start in the middle of the range, then move one notch toward whole wheat if you want more flavor, or one notch toward T-65 if you want more rise.

Hard red

Hard red winter is the bold grain. Malty, a little tannic, with a reddish bran. It makes the loaf that tastes like wheat. Protein is strong enough for hearth bread on its own.

Flour	Best use	How it bakes
Hard Red whole wheat T-110	Rustic hearth bread, long-ferment sourdough, crackers, hearty rolls	Deepest flavor. Thirsty. Expect a closer crumb unless you rest and ferment well.
Hard Red lightly sifted T-85	Everyday whole-grain bread, pizza, pasta, dinner rolls	The daily driver. Most of the flavor, enough finesse for a tall loaf.
Hard Red all purpose T-65	Sandwich loaves, pizza, enriched doughs, any recipe written for bread flour	Still nutty, but finer. Easiest hard-red swap for bagged flour.

Hard white

Hard white winter has the strength of hard wheat and a milder, faintly sweet bran. It is the crowd-pleaser: sandwich bread, tortillas, and pizza that still taste like grain.

Flour	Best use	How it bakes
Hard White whole wheat T-110	Family sandwich bread, tortillas, pancakes, mild sourdough	Whole-grain nutrition without the sharp red-wheat edge.

Flour	Best use	How it bakes
Hard White lightly sifted T-85	Everyday bread, pizza, English muffins, hamburger buns	The house loaf flour. Balanced flavor and reliable rise.
Hard White all purpose T-65	Sandwich bread, cinnamon rolls, pizza, enriched dough	Mild and fine. Blend with soft white when you want tenderness.

Soft white

Soft white is the tender grain. Lower protein, delicate flavor, a crumb that flakes and melts. MeadowSweet mills it lightly sifted and all purpose — not as a whole-wheat bread flour. Use it for pastry, or as the soft half of a bread blend.

Flour	Best use	How it bakes
Soft White lightly sifted T-85	Biscuits, scones, pie, quick breads, tender pan loaves in a blend	A little more grain character than T-65. Still not a stand-alone hearth flour.
Soft White all purpose T-65	Pie crust, cookies, cakes, biscuits, pancakes, short pastry	The pastry flour. Fine, pale, and forgiving.

Kamut

Kamut (Khorasan) mills golden and tastes buttery. The dough is extensible — it stretches more than it snaps back — and oven spring is modest if you use it alone. Beautiful for pasta, flatbread, and golden loaves. Blend it with hard white when you want a taller slice.

Flour	Best use	How it bakes
Kamut whole wheat T-110	Ancient-grain hearth bread, crackers, porridge bread	Deepest Kamut flavor. Golden crumb. Keep hydration moderate.
Kamut lightly sifted T-85	Pasta, flatbread, golden pan loaves, blends	The Kamut most bakers reach for. Flavor first, structure second.
Kamut all purpose T-65	Egg pasta, enriched doughs, golden sandwich bread in a blend	Smoother and easier to sheet. Still buttery.

Rye

Rye whole grain is earthy, a little spicy, and sticky in a way wheat is not. It has pentosans instead of a wheat-style gluten network, so it will not hold a tall loaf by itself. Use it as a flavor flour: 10 to 25 percent of the total flour in a wheat dough. Above about 30 percent, give it a sourdough and expect a closer, moister crumb. A small share of rye also feeds a starter and deepens a hard-red loaf.

Flour	Best use	How it bakes
Rye whole grain	Country loaves, crackers, starter feed, soakers, rye-wheat bread	Start at 15–25% of the flour. Sticky is normal. Do not flour the bench to fight it.

Suggested blends

These are starting formulas, not laws. All percentages are of total flour weight. Mill each grain to the grade named, then stir the flours together before you add water.

Blend	By weight	Reach for it when
House sandwich	70% Hard White T-85 + 30% Soft White T-65	A mild, soft-crumb loaf for every day
Family white-wheat	50% Hard White T-65 + 50% Soft White T-65	Kids, toast, and cinnamon rolls
Hearty hearth	60% Hard Red T-110 + 40% Hard White T-85	A weekend sourdough with real wheat flavor
Daily red	70% Hard Red T-85 + 30% Hard White T-65	Bread that tastes like hard red and still slices clean
Country rye	75% Hard Red T-85 + 25% Rye whole grain	Montana country loaf, crackers, starter bread
Light rye	85% Hard White T-85 + 15% Rye whole grain	Just enough rye to smell like a bakery
Pizza	80% Hard White T-85 + 20% Hard Red T-65	Stretch, color, and a little chew
Golden Kamut	60% Kamut T-85 + 40% Hard White T-65	A tall golden loaf that still tastes like Kamut
Pasta	70% Kamut T-85 + 30% Hard White T-65	Egg pasta and hand-cut noodles. Kamut T-65 if you want a smoother sheet
Biscuits and pie	100% Soft White T-65	Or 80% Soft White T-65 + 20% Soft White T-85 for more grain
Pancakes	50% Hard White T-65 + 50% Soft White T-65	Tender cakes with enough structure not to fall apart
All-purpose house	40% Hard White T-65 + 30% Hard Red T-65 + 30% Soft White T-65	One bin for bread, pizza, and weekday baking
Crackers	50% Hard Red T-110 + 30% Rye whole grain + 20% Hard White T-85	Thin, seeded, or plain. Bake until dry

Hydration hint: T-110 blends like the hearth loaf in the quick reference, often 76–84%. T-65 blends behave closer to bagged flour, often 68–76%. Rye and Kamut like to sit in the middle and rest before you judge the dough.

A SIMPLE WAY TO CHOOSE

Flavor loaf: more hard red T-110 or T-85. Family loaf: more hard white T-85 or T-65. Tender bake: more soft white T-65. Golden and buttery: Kamut. Earthy: a little rye. When a bake is dense, move one step toward T-65 before you change the recipe.

KEEP THIS PAGE HANDY

Quick Reference

The whole guide, reduced to a glance.

Rules that almost always work

- Weigh flour. Then watch the dough.
- Add water, not more flour, when something feels stiff.
- Rest 20 minutes after mixing flour and liquid. Decide nothing important before that rest.
- Hard wheat for bread. Soft wheat for tenderness. Blend for everyday life.
- Mill close to bake day. Freeze the rest. Store berries, not flour, long-term.
- Bake whole-grain breads a little longer and cool them a little longer than white loaves.
- Change one variable per bake. Notes beat memory.
- Mill with the widest gap that still gives the texture you need. Warm flour is fine; hot flour is not.

Starting hydrations for 100% freshly stone milled bread

Grain	Try this range	Notes
Hard red or hard white	75–85%	Begin at 78% and adjust by dough feel
Soft white	70–80%	Lovely for pan loaves when blended
Kamut	70–80%	Extensible; don't chase extreme wetness at first
50/50 hard + soft	74–82%	A friendly everyday sandwich dough

Hydration = (weight of water ÷ weight of flour) × 100. Other liquids count; eggs and honey count partially. These ranges assume a fine grind and room-temperature water.

Mill settings at a glance

Grain	Mill approach	Watch for
Hard red or hard white	Medium-tight; tight for fine sandwich flour	Sandy crumb means grind finer next time
Soft white	Medium-tight, lighter feed	Too tight only adds heat
Kamut	Two-pass: coarse, then fine	One tight pass runs hot
Any grain	Widest gap that still works	Open stones when idle; never mill empty

A first loaf worth baking this week

500 g freshly stone milled hard white wheat (or 350 g hard white + 150 g hard red). 390 g water (78%). 10 g salt. 2 g instant yeast, or 100 g active sourdough starter and 10 g less water. Mix flour and water; rest 30 minutes. Add salt and leaven. Fold three times over 90 minutes. Bulk until the dough is airy and jiggly, not doubled-to-collapse. Shape, proof until the poke test passes, and bake in a covered pot at 450°F for 20 minutes, then uncovered at 425°F until the crust is deep and the center hits 203°F. Cool before you slice. That loaf will teach you more than another chapter.

> **THE POINT OF ALL THIS**
>
> Freshly stone milled flour is not harder than bagged flour. It is more honest. It tells you what the grain actually is — flavor, fiber, oils, and all. Once you learn its habits, going back to a year-old paper bag feels like cooking with a photocopy.