Northern California Fibershed Producer Newsletter

Tactile Reading for the Fiber & Natural Dye Community



Cover art:

"Mother & Lamb"

by Sirima Sataman Fibershed producer, artist, teacher/mentor

Created with a hand-carved wooden block

Sirima and her husband have been hard at work breathing life back into his family's 50-year-old farm (Blackberry Farm) through sustainable practices. A sociable flock of Shetland sheep help manage and improve pastures and provide soft wool to local spinners, knitters and weavers. Blackberry Farm is part of the Climate Beneficial program as a wool and natural dye producer.

IG: @bbfarmbolinas IG: @ssataman

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Welcome to the 10th edition of the Fibershed Producer Newsletter!

A BRIEF NOTE BY LEXI FUJII, FIBERSHED PRODUCER COORDINATOR

The flowers are blooming, the birds are singing, and my nose is sneezing — what wonderful signs of Spring. Inside this 10th edition of our biannual Fibershed Producer Newsletter you'll find: upcoming Producer Events and Learning Center Workshops, stories from farmers and artisans around our fibershed region, the launch of our 2023 Borrowed from the Soil Design Challenge, Climate Beneficial Agriculture Program updates and resources, the latest news from our local mills, and more.... even Fibershed Staff baby photos. That's right, you read that correctly, keep reading and enjoy!

Support, Resources & Upcoming Events for Fibershed Producers

Fibershed Natural Dye Farmers Market

Sunday, May 7, 2023 | 10 am – 2 pm

Calling all natural dye enthusiasts, artisans, hobbyists, production dyers, gardeners, and curious creatives!



& Plant Starts

Natural Dye Seeds

Seed Exchange: Bring any dye plant seeds to exchange

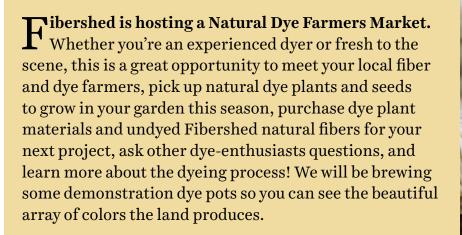


Natural Dye Demonstrations

Locally produced undyed natural fiber products



Kid's Fiber Arts Activities





Swap Closet
Bring 100% natural fiber
clothes to swap —
clean & in good condition



Bento Boxes for purchase from Kinoko Japanese

Please note there is limited to no phone service in this area.

Wifi is available on site.



Fibershed Learning Center 14000 Point Reyes – Petaluma Road Point Reyes Station, CA 94956

We recommend that you map your directions out prior to driving.

 $Photos\ by\ Paige\ Green,\ except\ market\ photo\ by\ Noelle\ Gaberman$



Producer Mini Meetup at Valley Oak Mill in Woodland, CA

Monday, April 10, 11:30 am – 1:30 pm

Open to 10 producers - limited spots available

Marcail at Valley Oak Wool Mill will be hosting a 2-hour tour for Fibershed Producers.

Please RSVP to lexi@fibershed.org as soon as possible.

Ongoing: Carbon Farm Conversations with Amy Lofting

First Friday of the month, 1:00 – 2:00 pm PT via Fibershed Zoom

Once a month, producer-member Amy Lofting has been facilitating a one-hour Carbon Farming Conversation online. Everyone is welcome, whether you are new to the ideas of carbon farming or already have lots of experience.

Carbon farming is moving carbon! It is the act of removing excess CO2 from the atmosphere and converting it to plant and/or soil organic matter through on-farm practices that are known to improve the rate of carbon sequestration. Anyone can carbon farm on the scale that's right for them. Even one small action, right for your unique life circumstances, can make a difference and help us all get on track for a healthier planet.

So, come on down! Join us for one or many conversations, amicable interchanges of opinions, news, information, and reflections. We will sometimes be joined by Mike Conover, Fibershed's Climate Beneficial Technician.

Zoom Information:

- https://uso6web.zoom.us/j/86038617158
- Meeting ID: 860 3861 7158
- Find your local number: https://uso6web.zoom.us/u/kcIUERpQu8

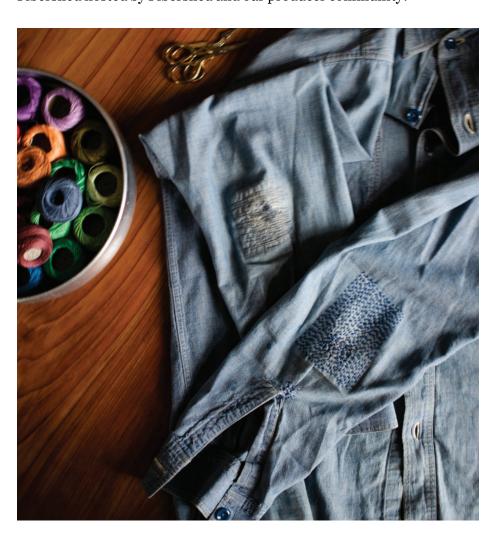
Upcoming dates:

- April 7
- May 5
- June 2

Fibershed Mending Hubs:

Marin, Mendocino, & Alameda County

Check out these monthly mending events in our Northern California Fibershed hosted by Fibershed and our producer community!



Producer-Led: East Bay Mending Bar (Early) Happy Hour — Oakland, CA

- When: Third Saturday of every month, 1-4 pm
 - ► Next date: **April 15**
- Hosted by: Elaine of KOSA Arts
- Where: "The Werkshack" (werkshack.com) in Oakland (25th street close to Broadway. Buses and 5 block walk to Bart)
- Each session will have a mending teacher with an area of mending expertise, but all mending welcome!
- RSVP to: Elaine at ejhamblin@gmail.com

Fibershed: Monthly Mending Bar Happy Hour — Point Reyes Station, CA

- When: Fourth Thursday, of every month, 4-7 pm
 - ► Next date: **April 27**
- **Hosted by:** Fibershed and local mending teachers, Heidi Iverson and Allison Reilly
- Where: Fibershed Learning Center (14000 Point Reyes-Petaluma Road, Point Reyes Station CA)
- Snacks and supplies provided, please bring a mending project
- RSVP here: eventbrite.com/e/265319125647

Producer-Led: Monthly Mendocino Mending Circle — Various Locations

- When: Last Sunday of every month, 11 am-3 pm
 - ► Next date: **April 30**
- Hosted by: Marie of Full Circle Wool
- Where: Rotating locations throughout Mendocino County
- ► Next location: Mariposa Institute, Ukiah
- No supplies provided, although natural fiber scraps to share
- There will be snacks, drinks & good company
- Any crafts (beyond mending) are welcome!
- $\bullet \ RSVP \ or \ more \ information: \\ Marie \ Hoff, admin@full circlewool.com$



Foxtail Abatement Workshop at Green Goose Farm

Monday, April 24, 10 am -1 pm

The biggest concern for our livestock and grazing producer network is the increase of foxtail in their pastures. Foxtails can cause incredible damage to both livestock and our working dogs that protect them. If you would like to learn about different methods to reduce or eliminate foxtails, please come to our workshop at Green Goose Farm in Cotati to join the discussion and learn what is working and what isn't.

Several of our Producers have participated in a pilot program using brassica seed mix to out compete the foxtails. Others are using prescribed grazing to utilize this change and one of our producers will be implementing prescribed burns to reduce the number of foxtails. Within this workshop we will have many different tools that have varying levels of effectiveness in foxtail abatement. Come and learn from each other and have some snacks and coffee with your fellow producer members.

RSVP to Sarah Keiser at sarah@fibershed.org

Virtual Grazing & Land Stewardship Conversations with Sarah Keiser

Once a quarter

Monday, May 1, 6:30-7:30 pm

This is a continuation of last year's general discussions on land stewardship and grazing fundamentals, hosted by Sarah Keiser. This is an opportunity to ask about pasture health, rotational grazing regiments, soil regeneration, carbon farming practices, and more!

Zoom Meeting Information:

- https://uso6web.zoom.us/j/83877617630
- Meeting ID: 838 7761 7630
- Passcode: 751938
- Find your local number: https://uso6web.zoom.us/u/kogwrVspb

1:1 Grazing & Land Stewardship Support with Sarah Keiser

Pibershed is offering limited onland 1:1 Grazing and Land Stewardship support with Sarah Keiser in 2023. If you are interested in 1:1 support, please reach out to sarah@fibershed.org.

Here are some of the ways Sarah can support you:

- Animal husbandry support
- Prescribed grazing implementation, planning and troubleshooting
- Portable electric fence preferred providers, training and troubleshooting
- Hedgerow planning and implementation
- Riparian restoration
- Pasture improvement
- · Soil building advice
- Lambing and kidding support and guidance
- Animal emergency kit planning
- Livestock guardian animals advice, care and training

Photo by Paige Green

Producer Business Curriculum

All Fibershed producer members have access to our Business Curriculum, which is designed to empower Fibershed Producers with basic business, strategic planning, marketing, and financial skills applicable to fiber economy businesses at any stage in development or tenure.

Courses are served "a la carte", delivered online through recorded webinars, and includes a suite of practical template-based tools to apply to each specific business. All webinars will be 1-2 hours long. Courses are applicable to Producers at all levels of business experience and are exclusive to Producers with a current membership.

Here are samples of the course offerings:

- Financial Basics for Fiber Economy
- Sales Strategy: Margins, Pricing, & Channels
- Social Media Marketing Best Practices
- Holistic Business Breakeven & Enterprise Budgeting
- Insurance & Liability
- Inventory Management
- Agritourism
- Introduction to Strategic Planning

Visit **fibershed.org/business-curriculum** for a full library of courses. You can email **lexi@fibershed.org** for the access password.

Grazier's Toolbox Spotlight

Birthed out of the Fibershed Producer Program's Business Curriculum and its support of the Grazing School of the West, this is a series of practical business operations tools developed for contract grazing businesses: The Grazier's Toolbox.

Each tool is geared towards emerging and existing goat/sheep grazing outfits operating for various needs, including fire mitigation, integrated crop-livestock systems (ICLS), municipal land management, and general land or property maintenance and stewardship. Some tools are also relevant to sheep/goat meat and fiber producers, regardless of contract grazing activities.

The following tools are included in the Grazier's Toolbox:

- Contract Job Breakeven Calculator
- Contract Grazing Agreement
- Lamb Meat Production & Sheep Herd Growth Calculator
- Grazing Business Plan Templates
- 3-Year Cash Flow Budget Template
- Lamb/Goat Meat Yield & Margin Calculator
- Hiring Guide

The Grazier's Toolbox is available to all Fibershed producer members. Learn more about the tools and access these resources, here:

fibershed.org/fibershed-graziers-toolbox You can email **lexi@fibershed.org** for the access password.

Borrowed from the Soil: A Fibershed Design Challenge

• Porrowed from the Soil' Design Challenge is a year-long journey for textile designers in California to explore a new soil-to-soil vision for the future of our material culture. We hope this Design Challenge will encourage you to explore beyond the garment, connecting your process and products with the farmers, the people, and the land in our region; while also looking at how your design choices can embed longevity, compostability, and respect for the soil.

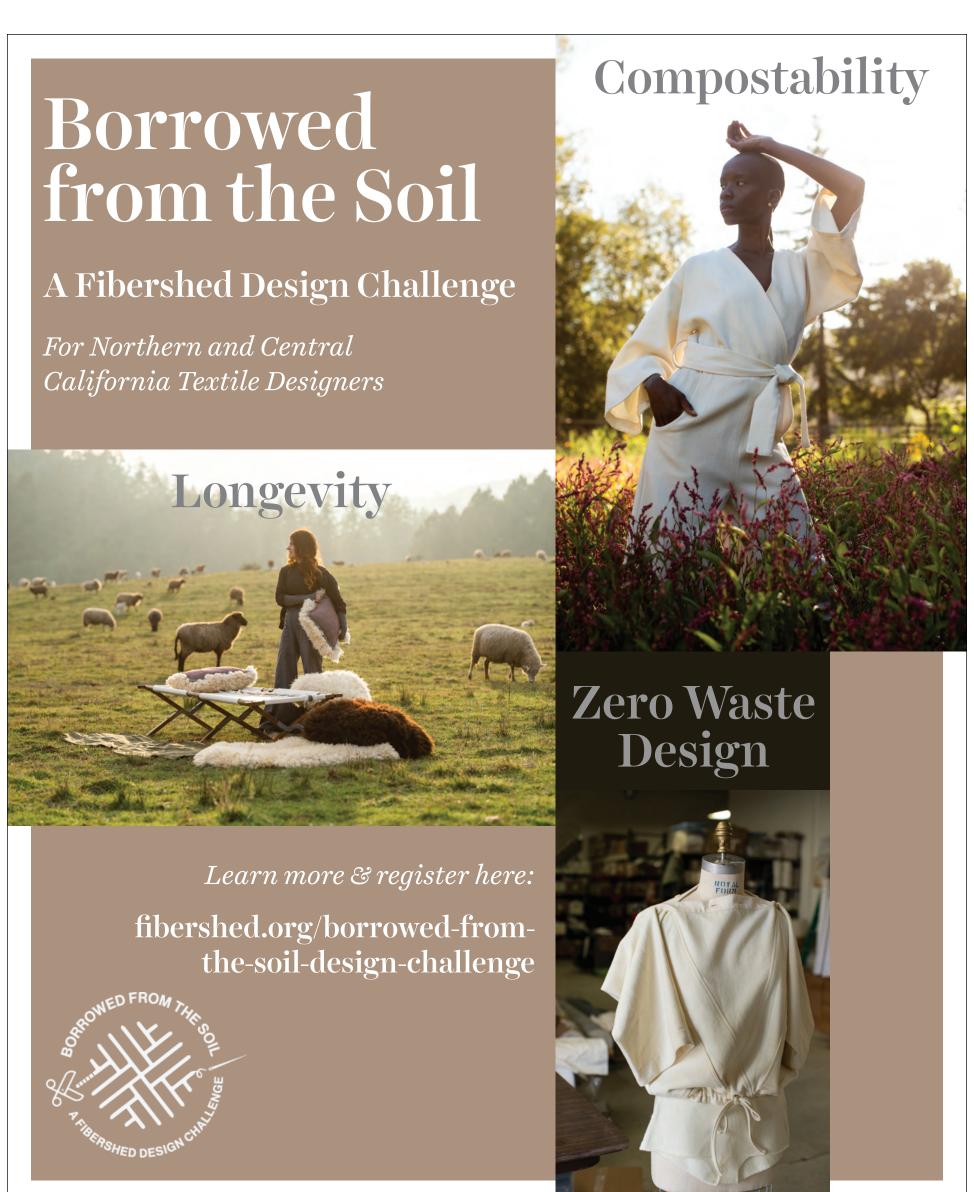
For more information on Design Challenge Commitments, Technical Design Focus Areas, Educational Events, and to join our challenge, check out our website:

fibershed.org/borrowed-from-the-soil-design-challenge

Launch Event on April 23, 11 am - 2 pm

We're hosting a Design Challenge Launch Event for participants of our 'Borrowed from the Soil' Design Challenge! Throughout the day, you'll be able to connect with other designers in the region, explore regional material options coming from our local landscapes, learn more about the upcoming Design Challenge offerings, and dive into the three Technical Design Focus Areas facilitated by local designers in the industry.

If you're interested in joining, please register here: eventbrite.com/e/586385774637



Photos by Paige Green

Climate Beneficial Updates

BY MIKE CONOVER, CLIMATE BENEFICIAL TECHNICIAN

New Carbon Farm Plans Completed for 6 Producers

Ongratulations to Navarro Vineyards, Red Creek Farm, Ferndale Farm, Hopland Research & Extension Center, McCormack Ranch, and Meridian Farm for their recently created Carbon Farm Plans! By identifying all opportunities for additional carbon capture on a producer's site, these plans are a major step for understanding and maximizing the carbon drawdown potential of our working lands.

The planning process is a whole farm assessment identifying the producers goals and objectives, a map displaying all of the conservation practices with carbon capture opportunities as well as a table outlining the associated quantification of carbon sequestration and on farm co-benefits. With their newly developed Carbon Farm Plans, these producers have all achieved Climate Beneficial Verified designation.

Thank you to Mendocino RCD, Humboldt RCD, and Contra Costa RCD for creating these Carbon Farm Plans, and congratulations to producer-member Amy Lofting of Meridian Farm for completing the Carbon Cycle Institute's Carbon Farm Planning Curriculum and generating your own plan!

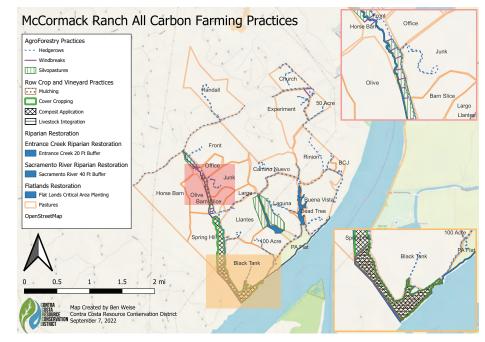
The CDFA also recently awarded funding to 19 Resource Conservation Districts to land stewardship plans, such as Carbon Farm Plans through their Conservation Agriculture Planning Grants Program.

Climate Beneficial[™] **Verification Process** Producer enrolls in Climate Beneficial Program (Producer must be part of Fibershed's Producer Program) **SOIL BENCHMARKING** Soil testing for organic carbon and bulk density **CARBON FARM PRACTICE IMPLEMENTATION** Producer annually implements carbon farming practices. Practice implementation details are tracked and projected carbon impact is calculated and logged. $Climate\ Beneficial^{^{\mathrm{m}}} Transitional$ **CARBON FARM PLANNING** Carbon Farm Plan developed through a whole farm analysis of carbon sequestration opportunities $Climate\ Beneficial$ $^{ imp}Verified$

Producer annually implements carbon farming practices. Practice implementation details are tracked and projected carbon impact is calculated and logged.

ONGOING

Soil resampled after 3 to 5 years



McCormack's Carbon Farm Plan identified and mapped a set of agroforestry, grazing, cropland, and riparian practices that could be implemented across the ranch.

Carbon Farming Practices

arbon farming' refers to a set of land stewardship practices that accelerate the drawdown of atmospheric carbon dioxide—ameliorating climate change, building healthier soils, and increasing soil water holding capacity. Many practices also have co-benefits such as increasing biodiversity, providing wildlife habitat and pollinator forage, and improving and ecological function.

To maintain eligibility in Fibershed's Climate Beneficial™ Program, producers implement and report (along with photos) at least one carbon farming practice a year.

Cropland Practices

- Compost Application to Croplands
- Conservation Crop Rotation
- Cover Crop
- Mulching
- No Till/Reduced Till
- Nutrient Management

Cropland to Herbaceous Cover

- Contour Buffer Strips
- Filter Strip
- Forage and Biomass Planting
- Grassed Waterway
- Riparian Herbaceous Cover

Grazing Land Practices

- Compost Application to Grazed Rangelands
- Nutrient Management
- Prescribed Grazing
- Range Planting
- Silvopasture

Restoration of Disturbed Lands

- Critical Area Planting
- Riparian Restoration

Woody Plantings

- Alley Cropping
- Hedgerow Planting
- Multistory Cropping
- Riparian Forest Buffer
- Tree/Shrub EstablishmentWindbreak/Shelterbelt
- Establishment
- Windbreak/Shelterbelt renovation

Supporting Practices

- Fencing
- Water development

Carbon Farming Education: Quick Guides

Which practices are best suited for a farm or ranch will vary based on ecological and site specific factors. Fibershed has produced a series of Carbon Farming Quick Guides on specific practices that are highly popular and beneficial in the Northern California Fibershed. Each guide contains the benefits of the practice, an overview of how the practice is implemented and general costs, complementary practices, and a list of regional technical support opportunities.

It's Spring Time!

Here are some practices we recommend implementing in this time of the year, each of which has a quick guide:

- Riparian restoration
- Silvopasture
- Tree and shrub establishment
- Hedgerow planting

Find the full list and access to the Quick Guides here: fibershed.org/carbon-farming-practices/

See a sample Quick Guide on hedgerows on page 8.

On-the-Ground Practice Implementation with Fibershed Producers!

Thank you to all the producers who applied for our Carbon Farm Seed Fund this past year and for your excellent projects! We were able to provide funding for 29 producers to carry out carbon farming projects on your lands, accounting for an estimated climate impact of 7,660 Mg CO2e over the next 20 years. Here are a few examples of projects currently underway:

Mustang Acres is planting a 760 ft. hedgerow of California native shrubs and trees, and restoring a riparian area around a seasonal wildlife pond. Some of the plants they are establishing include Buckeye, Inland Silktassel, Toyon, Cream Bush, Valley Oak, Coast Live Oak, Pacific Wax Myrtle, Red Flowering Currant, and Western Redbud.



Hedgerow planting at Mustang Acres (Photo by Paige Green)



Oak seedlings at Bodega Pastures (Photo by Paige Green)

Bodega Pastures planted oak seedlings along a grazed field to establish a silvopasture and are broadcast seeding pasture seed mix and sub clover. They also purchased portable electric fencing to carry out prescribed grazing.

Green Goose Farm is planting a hedgerow and silvopasture with nut, fruit, and nitrogen fixing trees; berry bushes; and grapes.

Blue Oak Canyon Ranch applied 1/4" compost to almost 10 acres to improve soil health.

Thank you again for all of your efforts to build soil, address climate change, and improve ecological function. Our Carbon Farm Seed Fund (CFSF) was created to directly fund carbon farming practices and is open to all producers who are enrolled in our Climate Beneficial Program. For more information about the CFSF or enrollment in the Climate Beneficial Program please contact mike@fibershed.org.

Expanding Capacity in Carbon Farm Planning

By Lynette Niebrugge, Carbon Cycle Institute

As the climate crisis accelerates, so does the need for effective climate-beneficial land management strategies to strengthen the resilience of our food and fiber production systems. The Carbon Cycle Institute is dedicated to building a workforce of carbon farm planners and carbon farmers.

Workforce training prepares planners to deliver holistic support to farmers and ranchers scaling climate-beneficial agriculture. Carbon Farm Planning is a holistic, systems approach to conservation planning with the carbon cycle and carbon capture as the organizing principle in which the farm or ranch plan is constructed.

The Carbon Cycle Institute wrote an article featuring two Carbon Farm Planners—Katie Smith, Mendocino RCD and Ben Weise, Contra Costa RCD—who have gone through CCI's Carbon Farm Planning Training and partnered with Fibershed to create three Carbon Farm Plans over the past year.

Read more about Katie and Ben's journey here: carboncycle. org/2022/11/28/expanding-capacity-in-carbon-farm-planning



Ben Weise, Contra Costa RCD, discussing riparian corridor with Kelsey Nichols at McCormack Ranch (Photo by Paige Green)



Hedgerows (CPS 422)

Part of Fibershed's Carbon Farming Education program, learn more online at: fibershed.org/carbon-farming





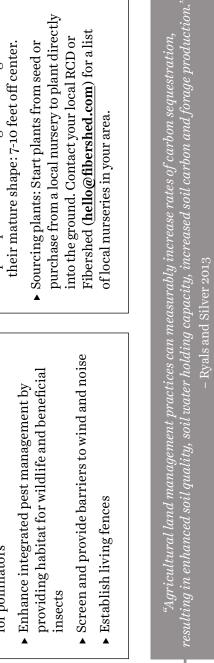
- ▶ Increase carbon sequestration in soils and vegetation
- ▶ Increase surface water infiltration and groundwater recharge
- ► Improve and filter air and water quality
- ► Reduce erosion and chemical drift
- ► Increase plant diversity and forage opportunities
- ► Increase local and regional biodiversity
- ▶ Enhance pollen, nectar, and nesting habitat for pollinators



Planning and Designing a Hedgerow

- hedgerow to guide design. For example, to support a windbreak, choose site to block prevailing winds: for a visual screen, select shrubs and trees with Determine the primary function(s) of your evergreen or dense growth habits.
- Hedgerows should be designed with regionally compatible with the soil, water, wind and light adapted plant palettes; choose plants conditions of your site.
- quick growing annual plants to fill gaps while hedgerow is young and becoming established Include multilayered perennial species and
- Consider a mix of trees, shrubs, forbs, grasses and other herbaceous plants.
- Plant properties to select for can include natural flowering time, propagation for seeds & cuttings. dyes, medicinal (for both human and livestock) pollinators such as milkweed, and scent.
- Choose plants for the selected site and function, with desired height and width.
- receive more sunlight overtime than plants Select appropriate plants for sun exposure: Note plantings south and west facing will facing north and east.
- 20' wide, depending upon single or multi row Hedgerows are a linear feature typically 10-
- · Space plants with enough room to grow into their mature shape: 7-10 feet off center.
- purchase from a local nursery to plant directly Fibershed (hello@fibershed.com) for a list into the ground. Contact your local RCD or Sourcing plants: Start plants from seed or of local nurseries in your area.

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Installing a Hedgerow

- measuring tape as a guide, and space plants by placing the desired plants in place along the line. Stake and mark the planting area, using a
- Establish tallest plants (dwarf trees or shrubs) as the base plants; layer plants from tallest to shortest; alternate different species based on this scaffolding/foundation.
- herbs, flowers, vines or companion plants may best be planted in subsequent years or seasons foundation plants. Supporting plants, shrubs, front of first line and stagger in between the once trees and their corresponding fungal Establish second row of plants slightly in communities are established.
- ► Shade tolerant herbaceous perennials can be planted under the trees and shrubs.
- Add edible and dye plants as space fillers.



Complementary Practices

- ► Windbreaks/Shelterbelts (CPS 380)
- ▶ Target Grazing and weed management (CP S528 & 314/315)
- ▶ Integrated Pest Management (CPS 595)
- ► Mulching (CPS 484)



Cost References

- require additional cost share and labor input, linear foot, but hedgerow projects may still depending on location and selected plants. ► California's Healthy Soils Program offers grants to reimburse hedgerows at \$9.50/
- and/or contribute labor in-kind can reduce the ▶ Producers who propagate their own plants added costs required to install a hedgerow.



Managing and Maintaining a Hedgerow

- ► Maintenance is required during establishment of plants for the first 1 to 4 years.
- animal impact. Consider gopher protection Determine what protection is needed from and/or temporary or permanent fence to protect newly installed plants.
- Determine what type of irrigation is needed for plant survival. Note, until plants are established, the will need to be watered regularly during the dry months.
- as drip irrigation, hand water or pump water. determine the type of irrigation system such • Consider your access and terrain to

· Alternatively a plant Cocoon or other one-

time water vessel can be installed.

- ▶ Weed control: consider mulch, implement target grazing or hand pull
- especially during spring through mid-summer when you are likely to disturb nesting birds. ▶ Avoid unnecessary pruning or trimming,



Technical Support

► Hedgerow Farms, hedgerowfarms.com

- Independent permaculture landscapers, such as Permaculture Artisans
- ► Resource Conservation District (see CARCD's website directory to find which one serves your area)
- ▶ Natural Resources Conservation Service (see NRCS's service center locator to find which office serves your area)



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www.fibershed.org

What Are Resource Conservation Districts?

From the California Association of Resource Conservation Districts website

We make conservation happen on-the-ground by partnering with local communities on a voluntary basis to care for California's land, water, soil, and other natural resources.

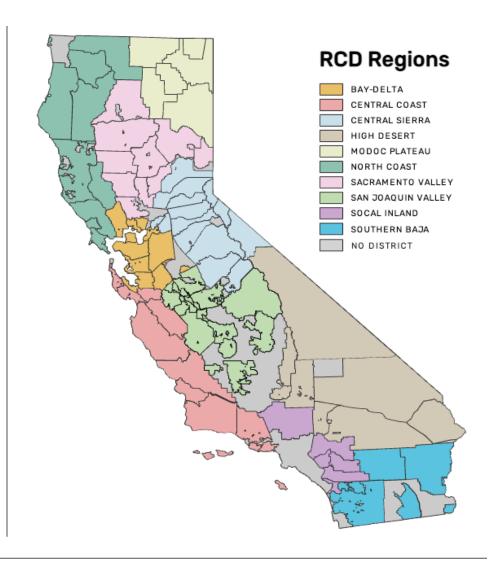
Resource Conservation Districts (RCDs) work to be Relevant, Excellent, and Visible go-to hubs for natural resource conservation and agriculture on public and private lands at local, regional, state, tribal, and federal levels. We were designed to evolve with the changing needs of people and the land, to ensure that California is home to thriving and resilient communities, landscapes, and economies.

Our statewide network serves rural, urban, and suburban populations, and consists of conservation professionals and local experts committed to seeing our communities thrive.

Learn more at carcd.org/rcds/what-are-rcds

Find Your Local Resource Conservation District (RCD)

The RCD network includes 95 special districts serving rural, urban, and suburban communities across the state. See where we work and how to connect with your local RCD. The 95 districts are grouped into ten regions. To find your local district, you can look up your region on the map found here: **carcd.org/rcds/find**.



Textile and Fiber Systems Policy Updates: Pulling Levers for System Change



Textile waste chokes the beaches, roads, waterways and overburdened landfills of Accra, Ghana, as in many other locations around the world where the excesses of the global textile industry are visibly destroying natural systems and human lives. (Photo by the OR Foundation)

Extended Producer Responsibility for Textiles

Extended Producer Responsibility (EPR) is a type of legislative policy that holds the producer of a product responsible for the costs involved with its end-of-life management (e.g. collection, recycling, safe disposal). When well designed, EPR policies can incentivize better product design for less waste and environmental burden. EPR has already been established in California to improve safe handling and disposal of products such as pharmaceutical waste, mattresses, and carpets. EPR for textiles could help address textile waste and pollution, incentivize better material and design choices, and potentially begin to shift the model of overproduction and overconsumption ("fast fashion") that has come to dominate the industry. However, textile is a complex category including widely diverse materials, making efficient collection, sorting, repair, and recycling a challenge.

France is currently the only country with an EPR program for textiles, although several new programs are in development in the European Union. In 2023, California's legislature is currently considering a bill on textile EPR (SB 707). This bill has the potential to set global precedent, and we'll keep our community informed as discussions about the bill move forward.

To learn more about EPR for textiles and its potential to help alleviate the global burden of textile waste and pollution, we highly recommend reading the EPR position paper just released by our colleagues at the OR Foundation in Ghana. You can take action on this issue right now by endorsing the position statement that accompanies this new report. Find the report and take action here: StopWasteColonialism.org

Ban on PFAS chemicals in textiles in California

Chemicals applied to textiles strongly affect their impact on ecological and human communities. A class of chemicals of great concern for textile health and management is PFAS (abbreviation for a broad group of chemicals, per- and polyfluoroalkyl substances). These are used for stain resistance and waterproofing treatments on textiles as well as other items such as nonstick cookware and food packaging. PFAS are linked to increased incidence of several types of cancer, impacted immune response, reproductive health issues, and are known to cause developmental delays. They are highly persistent, meaning that unlike most other compounds in nature, they don't break down over time, instead accumulating in the environment and in the bodies of organisms, including humans, across the world.

Good news in the movement to eliminate use of these harmful chemicals came last fall with the passage of AB 1871 in California, which banned the use of PFAS chemicals in textiles sold in California starting in 2025.

Fiber Farming Systems Legislation in California

Two other pieces of proposed legislation in California this year that our fiber producer community may want to know about: prescribed grazing for wildfire resilience (SB 675) and small farm equipment sharing (AB 552).

The small farm equipment sharing bill (AB 552) would provide technical assistance and grants to support conservation farming practices, enhance regional food and fiber systems, and offer cooperative resources for small and underserved farmers.

Proposed legislation to enhance support for prescribed grazing as a wildfire mitigation strategy (SB 675) would integrate prescribed grazing into some of the state's existing wildfire resilience programs through prescribed grazing outreach, education, infrastructure, and wildfire resilience planning.

Both of these bills are being sponsored by CalCAN (California Climate Action Network.) For more information: calclimateag.org/currentcampaigns

Stay tuned to Fibershed newsletters and social media for updates throughout the year on these and other important topics in the work to build healthy regional natural textile systems!



Fibershed Learning Center In-person Workshops

In-person workshops at the Fibershed Learning Center in Point Reyes Station have been ongoing for over a year, and well-attended! Some of our upcoming workshops are listed below.



As part of your producer membership, you get a 10% discount on Fibershed workshops and events. Enter the code "producer" at checkout for your discount.

Visit **fibershed.org/learningcenter** for more details and links to register for classes on Eventbrite. (Access website with QR code at left.)

 $Saturday \ {\it \& Sunday}, April \ 15\text{-}16$: Eco Printing with Cory Gunter Brown of Earth My Body

Saturday and Sunday, April 29-30: Sewing a Kimono Jacket (Happi Coat) with Rimiko Berreman

Saturday, May 6: Flax Processing with Chico Flax

Saturday, May 6: The Magic of Twill in Basketry with Charlie Kennard

Sunday, May 21: Sewing T-shirts 101 with Gynna Clemes (taking place at a neighboring site, the Viviculture Center)

Saturday & Sunday, May 27-28 (Memorial Day weekend): "Pigmentshed"—Hyperlocal Paint Palettes & Reciprocal Studio Practice with Tilke Elkins of Wild Pigment Project

Saturday & Sunday, May 27-28 (Memorial Day weekend): A Needle and Some Thread: Sewing Garments by Hand with Noelle Guetti

Friday through Sunday, June 2-4: Indigo Dyeing with Aboubakar Fofana

Friday through Sunday, June 9-11: Fermented Mineral Mud-Dyeing with Aboubakar Fofana

 $Saturday\ and\ Sunday,\ July\ 15\ \ensuremath{\mathcal{B}}$ 16: Creating Sculptural Handmade Paper with Michelle Wilson

Sunday, August 6: Weaving on a Mayan Backstrap Loom with Sari Monroy Solís

Sunday, August 6: Embroidery Project with Arwyn Moonrise

If you are an experienced fiber arts teacher and interested in teaching at the Learning Center, email **learningcenter@fibershed.org** to discuss.

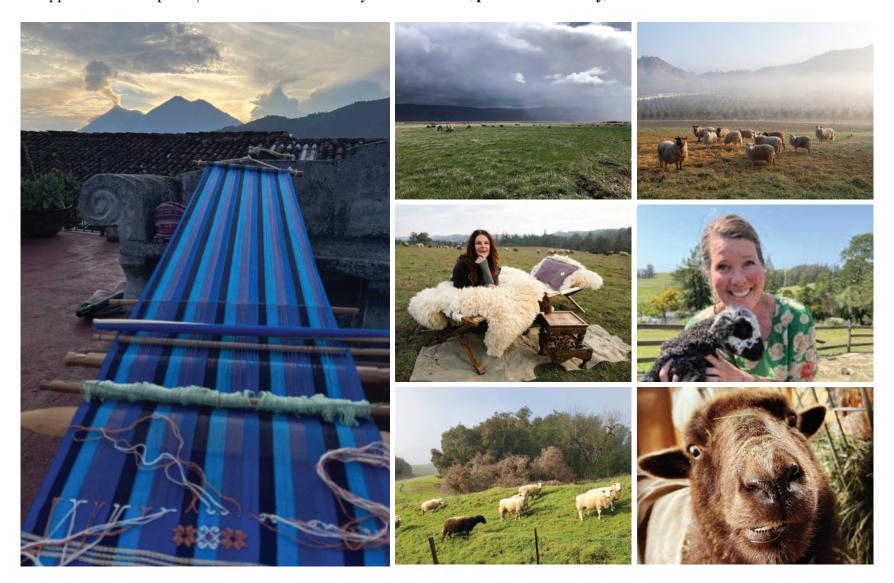


Top of page, ROW 1: pigments by Tilke Elkins, eco printing worshop with Cory Gunter Brown, flax processing at Chico Flax (photo by Paige Green); ROW 2: weaving on a Mayan backstrap loom (courtesy of Sari Monroy Solís), hand sewn garment by Noelle Guetti, Happi coat by Rimiko Berreman

Bottom of page, ROW 3: suspended paper sculpture by Michelle Wilson, twill basket by Charlie Kennard, Colorganic cotton t-shirts by Gynna Clemes; ROW 4: embroidery by Arwyn Moonrise, samples dyed with indigo in Aboubakar Fofana's workshop (photo by Anna Brones), Aboubakar Fofana working with mineral mud to dye cloth (photo by Francois Goudier)

Welcome New Producers

We want to welcome and highlight producers who have joined our Northern California Producer community since the publication of the previous issue of this newsletter. As always, you can find information about local fiber, dyes, and skills within our community, alongside direct links to contact or support their enterprises, in our Producer Directory: **fibershed.com/producer-directory/**



ROW 1: The Blue Weaver (San Francisco, CA):

Sari (Sarah) Monroy is a Mayan Kaqchikel weaver, natural dyer, and artist. Her work seeks to highlight and preserve ancestral fiber art traditions. She teaches Mayan backstrap loom weaving and natural dyeing, including resist dyeing used in traditional Mayan clothing. sarahmonroy.com; lablueweaver@gmail.com

ALE Sheep Company (Eagleville, CA):

ALE Sheep Company is owned and operated by Anna Odendaal. It began in 2012 when she had the opportunity to purchase a small flock of Suffolk ewes. It was first an FFA Supervised Agricultural Experience but, with the help of her family, Anna has grown the flock in to what it is today. The flock is made up of Suffolk sheep- a breed that originated in Britain during the 18th century. Suffolk sheep have black faces with white bodies, are naturally polled (without horns) and are raised primarily for their meat. Originally we just sold meat, but realized that there is so much value in both their hides and wool. Because of the course nature of their wool it is difficult to turn in to useable product.. until we discovered felting. We are now in process of creating felted products and organically tanned sheep skins. Our sheep are pastured all year round, grazing during the spring and summer months and fed hay during the winter when forage is not available.

ale sheep company. com; ale sheep company @gmail.com

Earth Garden Farms (Porterville, CA):

Our micro farm rests outside of Porterville, California in the Success Valley region of the Sierra Nevada foothills. Here our animals live outside under the sun, in the shade of blue oaks, and on carpet of native grasses and wildflowers. Our munching mowers target graze on pastures within a 1 mile radius of the farm that helps our community with weed abatement and fire mitigation. We raise heritage breeds of sheep and turkeys that grow slower but taste better, and are more adaptive to foraging for their own food. Our chickens are raised outside in tandem with our ram pen as they eat their waste hay, and are offered predator protection. Who wants to mess with a bunch of rams? Because we are also professional geographers, ('geo' meaning earth) we're committed to holistic management practices that sustains the earth, animals, and in turn you and me! This includes rotational and target grazing, kelp supplement for methane reduction, collecting food waste from local business, and zero waste packaging.

earthgardenfarms.com; earthgardenfarms@yahoo.com

ROW 2: Grange Home (San Francisco, CA):

I've always been a collector of tiny objets to large pieces of furniture. With so much beautiful design surrounding me, I thought there was an opportunity to reimagine how we might create modern, upcycled pieces

for their next chapter. Grange Home was born out of that curiosity—featuring one-of-a-kind Home and Lifestyle designs that support environmental health from different angles. Made slowly, to order; of natural, regenerative, or upcycled materials; Grange Home products are good for you and our planet—and that is a true modern luxury. I'm proud to work with a local ecosystem of tradespeople, ranches, and suppliers to create my designs, and I manufacture most pieces within my small studio in San Francisco.

the grangehome.com, beth @the grangehome.com

Heart and Hands Farm (Petaluma, CA):

My name is Julie Yarnall and I have a 4 acre farm in Petaluma. I am a certified Waldorf teacher and have also completed the Handwork training program. I own and operate a Waldorf preschool, kindergarten, and first grade called Heart and Hands Farm. We are a PMA. I love all of the fiber arts and love to teach them to children and adults! heartandhandsfarm.com; julieheartandhands@gmail.com

ROW 3: Heirloom East Bay (Castro Valley, CA):

Heirloom is located on 95 acres of Ohlone land in Alameda County, sustainably producing a number of products including wool, soap, eggs, and persimmons. We are exploring sustainable living practices for both the household and the land. We have goats, chickens, sheep, rabbits, and a few cats. Visit the self-serve farmstand on the property where we have a consistent supply of farm fresh chicken eggs. Availability of persimmons, and homemade jams and pickles varies by season.

heirloomeastbay.com; michaelrdrane@gmail.com

Rusty Fence Ranch (Santa Rosa, CA):

Our farm is a legacy property originally purchased by Bob's grandparents in the 30s. At that time, it was a chicken ranch with over 5000 hens and all the work was done exclusively by the family. Bob has so many fond memories of the abundance here and the hospitality his grandparents extended to the community, that when we moved in, we hoped to cultivate that once again. We started with a few laying hens and their sweet rooster, Buddy, and shortly after that we adopted a small flock of Shetland Ouessant cross sheep and their guardian llama, Ravenna. Since then, our flock of sheep has grown in size and we now have primarily fine fleece Shetlands in white, fawn, gray, black and brown. Suzanne — inspired by several other women Shepherdesses in the area — considers herself a tender shepherd and all of our sheep have names. Our ambassador, Thor, is a favorite, often greeting visitors and hoping for a little attention from new friends. suzk1216@gmail.com

(continued on the following page)









LEFT TO RIGHT: Sierra Valley Yaks (Calpine, CA):

Greg and Jenna have raised cattle for over 15 years. We became interested in yaks due to our alpine valley location, and the possibility of an animal that can be reared year-round in the Sierra Valley, with its cold winter climate. Further research into these animals excited us about the opportunities associated with their meat, fiber, and potential dairy production. We have thoroughly enjoyed our time with these animals, and are working to expand our herd with quality bloodlines. sierravalleyyaks.com; info@sierravalleyyaks.com

Wildcat Canyon Community School (El Sobrante, CA):

Our school is a community demonstration project for ecological repair and producing human material goods in a way that regenerates ecosystems. We are aspiring to create climate beneficial wool and partner with our small herd of 9 sheep to regenerate grasslands while managing stormwater and fuel loads. We would like to increase soil organic matter for better water holding capacity and reduced stormwater runoff into San Pablo Creek Watershed. We are working on water cycle education for pre-k through 6th grade students and their families. We are interested in implementing silvopasture, we are also engaging with the RCD to write a carbon farm plan, and to increase no-till food production for our school families and community. We are also interested in establishing tree crops via hedgerows and wind breaks. We also are the home of The Practical Arts Collective, a community based program that teaches foundational skills for creating sustainable and eco-friendly textiles, empowering people to become independent makers and conscious consumers. The community program is a gathering space for anyone interested in the production of natural fibers through weekly and monthly meetings, workshops, and networking. Workshops will include weaving, natural dyeing, spinning, and mending.

www.wild cat can yon.org; in fo@wild cat can yon.org

Wilde Works (Sebastopol, CA):

I have always been a maker with a strong connection to fiber and my path as a Waldorf hand-work teacher over the last 30 years, provided both professionally and artistically the direction of my current work as a textile artist. I grow my own dye plants and source local natural fibers often gleaned from textile producers. I like a variety of techniques and materials. Sometimes I like to create a series of something and sometimes one offs. My inspiration is in making things I myself love. wilde-works.com; lisawilde.york@gmail.com

Wilder California:

Wilder goods are made to bring beauty and intention into the things you touch most everyday. From my hands to yours, as I sew, braid and weave this leather my wish is that each piece will bring you pause and elevate your routine to ritual.

www.wilderca.com; tealeblue@mac.com

NOT PICTURED:

- · Ahmad Majid
- Bramble Tail Homestead (Sebastopol, CA): brambletailhomestead@gmail.com
- · Morey Shoop
- Rockin' Bar L (Petaluma, CA):

Rockin' Bar L has 3 acres in Petaluma with dairy goats, freezer pigs, cross purpose sheep, hens, cross purpose ducks, heritage breed turkeys, honeybees, a home vegetable garden, small-scale sales and dye material flower garden, and is a part of a community grazing project called Neighborgate.

mbarrell@comcast.net

Producer Voices

Regional Mill Updates:

Mendocino Wool & Fiber Mill Update

BY MENDOCINO WOOL & FIBER, UKIAH, CA

mendowool.com

Hi Fiber Friends!

Here's a brief update on what Mendocino Wool and Fiber is up to these days. We're so excited for what 2023 will bring! We have hired several new employees and training is underway. This will give us much more processing capacity, stability and flexibility in the coming months.

We are accepting new orders again! Our new minimum for yarn spinning is 10 pounds clean weight. The new spinner we have is so much faster and more efficient but it also needs larger batches for a proper set up.

Our customer work order process is under construction and will be streamlined and better able to help you get the right service soon. Keep a lookout for that announcement.

Don't forget to subscribe to our newsletter for timely updates. Sign up is through our website homepage: www.mendowool.com. We have lots in the works this year!

Here's to wooly adventures galore in 2023!

– Sarah and the Mendo Wool team



Regenerative Opportunities in Our Path to Smarter Textile Manufacturing

HUSTON TEXTILE COMPANY, MATHER, CA

hustontextile.com

Reflecting on how much has changed since we began this journey to responsibly engineer our own textiles with our first handloom, Huston Textile Company kicks off 2023 commemorating 10 years in bespoke textile manufacturing. We celebrate the fact that the world around us is evolving faster than ever and that we're continually challenged by what is needed to achieve 'excellence' for our textile company in fields of technical designing, knitting, and weaving.

As our technologies and team expertise expand, we will continue to be responsible for changing how consumers and clients think about functional advances and bringing products to market. We always strive for an accessible consumer luxury experience with continuous product innovation ahead.

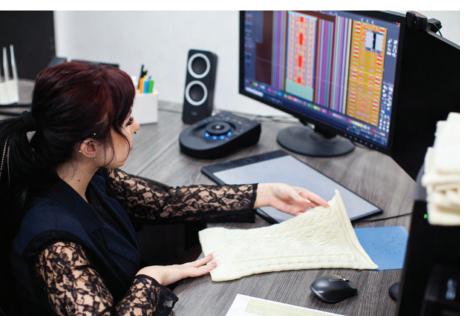
Transforming tangible realities from visions, we are competitive in industrial markets by building manufacturing platforms where products are reproducible in a consistent, efficient, and repeatable manner. As we design a more regenerative product, we create development strategies, engineer, and scale implementation of manufacturing platforms to build the functional performance demanded by specialty markets.

Our dedicated team and in-house fabrication systems allow endless opportunities for designing custom textile products. Alongside multiple advanced WHOLEGARMENT knitting machines, we can precisely prototype digital and physical goods more circularly for fashion, interior, and other technical textile markets. Recent upgrades in our woven division include state-of-the-art rapier loom technology that has the versatility and reliability for dependable weaving excellence that will take us confidently into our future.

Our fiber networks continue to offer raw material expertise as we explore advanced prototyping with a range of biomaterials including American cottons, bast fibers (industrial hemp), Climate Beneficial wools, and more. Every plant and protein fiber blend offers its own special textures and unique performance benefits, and we are so grateful to have such dedicated raw material producers and yarn makers in this country. Together, we work towards better qualifying domestically sourced, natural, and regenerative raw materials for multiple valueadded processes and goods for our industrial production purposes.

For a deeper look into our story and development projects, visit our new website www.hustontextile.com and be sure to sign up for our newsletter where our team will continue to showcase advances in smarter manufacturing through our growing catalogue of products/services. We look forward to hearing from you about your textile manufacturing needs in 2023 and beyond.







Valley Oak Wool Mill Update

BY MARCAIL WILLIAMS OF VALLEY OAK WOOL MILL, WOODLAND, CA

valleyoakwoolmill.com

Wow, reading back through my last producer voice feels like a year ago instead of 6 months ago! I talked about going to Black Sheep and how that was my first in person show since 2019. I just mailed off my application to attend BSG this year, so you can find me up there in June!

Last October I participated in two live shows: Lambtown and Oregon Flock and Fiber Festival. I had one weekend between them, which helped prepare and rest a minute before going back into show mode. I plan on doing these two shows again this year as well. Each show got a little better, I think it took some time for people to get used to the idea of getting out for a show. Hopefully this year will be even better for attendance and sales.

Every show I attended I was proud of the fiber spread I had to offer. Lots of different breeds and colors of fiber, it felt spectacular to offer so many diverse products! I don't want to forget to mention that I also participated in the Fibershed Farmers Market in July, which was so awesome because of the shared appreciation for local fiber, local labor, unique breeds and natural colors.

All of these shows I went to I brought my new trailer with me, which has been such a great friend! It's the perfect size to hold the gear for my

booth plus bring home fiber for processing. And then after a show I don't have to unload my car! Just unhitch the trailer and drive away! :) Pro tip: buy yourself a trailer!

Last newsletter I also talked about getting my new spinning machine fixed and the growth in confidence I had with it. I've grown even more since then, and just within the last month I've made a wonderful breakthrough on how to keep some softness in the yarns. I feel much happier with the product I can make from it.

I was hoping the machine would help me during the winter since my other machine is so temperature sensitive. It has definitely helped! Mostly I love that I can start a new bobbin at any time during production compared to the other machine where I could only start a new bobbin at the beginning of a run. Not a good system for production turn around or for the winter.

In November I celebrated 5 years of business AND my last payment on the original machinery purchase! That's been more fun to say than the actual financial reality so far. I had an extremely difficult December because of a cocktail of the most expenses I've ever faced in a one month timeframe coupled with the worst time of year for people to pay their invoices on time. It was extremely stressful, and also seemed to carry over into January, but so far February has started to feel like things are normalizing.





I'm very excited to announce that yesterday, the day before the deadline for this spring newsletter, I received another new machine: a Belfast carding machine! I'm now able to produce a couple new products: rug yarn, and small batts year round (although my large batting I'll still offer twice a year from my other carding machine) I will be supplying Love Fest Fibers with their custom made yarns for weavers and crafters! Very excited to be working with Britt who is a very kind and passionate fiber artist and enthusiast!

So many new things, it all feels pretty wonderful right now. Thank you to everyone who continues to bring me fiber and support my business. I really can't do this without customers who want/need the product and appreciate what I do. We're in this together and I know we're mutually thankful for each other!:)



Japanese Indigo: Field Notes 2023

BY CRAIG WILKINSON

Fall & Winter 2022

- Harvest and collect Japanese Indigo seed from my 1000 plant crop located at the Santa Rosa Junior College, Shone Farm in Forestville California.
- Dry the rough cut indigo flowers and stems by laying them out on tables in a greenhouse for several weeks or more depending on the weather.
- Bring dried indigo flowers home for final drying and begin stripping flowers from the stems. The dried flowers contain the small mature indigo seeds.
- Continue the final seed cleaning process by using a Clipper mechanical seed cleaner located at Shone Farm.









Spring 2023

- Send a sample of the seed to Headstart Nursery located in Gilroy, California to conduct a germination trial.
- Past germination ratios have consistently averaged around 85% which is good.
- Determine the number of indigo seedlings to order for the 2023 season.
- I am currently planning to order 3600 seedlings to be delivered in trays of 128 indigo seedling plugs.
- Coordinate the seed sowing dates to the projected mid April delivery dates with Headstart Nursery.
- The time between sowing the seed and delivery of seedlings is approximately 45 days.
- · Receive delivery of indigo seedlings in mid April.
- Unpack and stage seedlings in a greenhouse and begin distribution.
- If all goes well, 1200 indigo seedlings will be delivered to the Fibershed Learning Center in Point Reyes Station California shortly after the mid April delivery.
- Some of the seedlings will be donated to The Sonoma School Garden Network.
- Approximately 1000 seedlings will be planted at the Fibershed Learning center.
- Indigo seedlings will be available for purchase at the Spring Fibershed Natural Dye Farmers Market scheduled for early May 2023.
- Japanese Indigo seed will be available starting in mid March on the Fibershed Marketplace and physical locations yet to be announced.
- Plant and cultivate indigo!
- Harvest and process indigo leaves!
- Create indigo dye vats producing beautiful blue colors.
- \bullet Collaborate with other Fibershed Producers inspiring meaningful arts and crafts.

Summer 2023

- Continue cultivating, harvesting and processing indigo from gardens and larger crops.
- Create indigo dye vats and collaborate with others to inspire meaningful arts and crafts.

Fall and Winter 2023

• Nurture the flowering indigo to encourage a healthy new seed harvest with visions of beautiful 2024 indigo gardens and crops.



Transmutation

BY GRACE HARRIS JOHNSON

I've been thinking a lot about home. Each home holds powerful people, whether they know it or not. As a creator that is tied to earth, I think about how to honor the things that live in our spaces that help fulfill our basic need to be safe, supported, and inspired; Because this slow shift in mindset is helping me develop my own sourcing ethics and also manage the material chaos around me. I remember the big black table in my childhood living space. You can't help but to gravitate towards it for any occasion. It was so big and welcoming for everybody, with lots of light. It was some type of black and brown wood, and it grounded the space.

I recently visited my cousins in Collinsville, Alabama. I've been so into this sourcework with fibers that I was excited to see where the cotton was and what the operations look like out here.

We (ok, I) get excited, I see some, I don't get a picture, and worry I won't see any more cotton again and we wouldn't be able to see or touch it. We drive a little down the road and to my surprise there's acres of it right across from my auntie's house. I never processed it before. The cotton was white, soft, wet, beautiful. We clown about pickin' cotton because it's the only joke we got to manage our trauma with this medicine plant. It's not our cotton anyway.

For someone who is trying to understand the future of regenerative fibers in America (and across the diaspora), your mind strays towards a vision of what this could be. I see cotton, veggies, flowers, families, music. Is that too much? In my minds eye, regional cloth made from this very cotton should be prioritized and accessible to the woman right across the way, who is tie-dyeing tee shirts as part of her healing earth craft on land in the cuts of Alabama. How far away are we from this vision. The reality of the concept is difficult to grasp for her, especially in a home drowning in material chaos manufactured from all over the world. Sometimes soul work is the first step to finding value in something right in front of our eyes.

So then I start to wonder, "who owns all this?"

I learn the cotton gin, "Cherokee cotton gin" is 20 minutes away in Centre, Alabama and has been owned in some form or another by the same families for over 100 years. Hmm, I wonder what they did before that.

I learn the gin is for sale. Okay, amazing. Although I don't have the agency to change much right now, we can do our little part. I see this as a trend for windows of opportunity to shift the tide towards re-design. And I don't think we're very far if we're willing to go at it together. Let us be willing to think closer to home. source. Let's experiment with future visions and honor the rainbow of humans who are active agents in its creation.



California Cloth Foundry receives the CPSC Golden Arrow Award for overall excellence in product stewardship & Climate Beneficial composted waste

BY LYDIA WENDT

As the founder of California Cloth Foundry (CCF), I am incredibly proud to be a longtime member and contributor of Fibershed's Producer Network. If we have not yet met at one of Fibershed's numerous community gatherings; I'd like to share with you a little about what we do.

At CCF, we create naturally innovative commercially scalable textiles and apparel solutions with regenerative materials. Some are sourced right here from our Northern and Southern Fibersheds. Our manufacturing formulas and products are designed and made clean and healthy for an ecologically-circular and Climate Beneficial cloth and clothing economy. We work with local fiber producers, botanical dye growers, mills, dye houses, and California's garment workers to make our collections. Our fabrics and fashion are designed for the soil, from the soil, in collaboration with nature, and, most recently, we composted our production waste, right here in our own backyard - with the city of Los Angeles.



As someone with over 20 years experience in fashion, I have seen firsthand the negative impacts of fast fashion and its significant waste and toxic ingredients and practices - many that have deeply impacted our state and local industry. That's why I founded CCF in 2014 with a simple mantra: make a healthy wardrobe in collaboration with nature. We only use certified clean and sustainable natural fibers, natural dyes, and natural finishes, many certified organic and regenerative as well as Fibershed Climate Beneficial $^{\text{TM}}$. We do not use fossil-based/petrochemical-based fibers, treatments, or dyes.

Because we are committed to transforming this wasteful and toxic industry into one that is thoughtful and regeneratively circular, Fibershed introduced our work to the California Product Stewardship Council's textile division in fall of 2021. This exciting news is the result:

In January 2022 we (CCF) participated in the California Product Stewardship Council's (CPSC) textile-waste program with the City of Los Angeles: Sanitation and Environment (LASAN) and qualified for America's first federally-funded compostable-fashion pilot. Our apparel cutting room waste was composted at Future Foods Urban Farm, in collaboration with nature, CompostableLA, and their food compost piles, CPSC, and LASAN. In just three months, we received compost sift-soil that was sent to three independent soil testing labs across the US. The test results were deemed not only beneficial for growing food in California's backyard, but perfectly pH balanced and nutrient-rich, ready for any topsoil job!

Because of our soil-to-soil climate, and people, beneficial commitment in business practices, production protocols and compostable ingredients; California Product Stewardship Council has awarded us the prestigious Golden Arrow Award for overall excellence in product stewardship. This award recognizes a company that demonstrates the characteristics of CPSC's Green Award, for product, Bow & Arrow Award, for ethics & supply chain, and Infinity Award, for circularity.

We are grateful to Fibershed for the introduction to CPSC and believe that what we do, as producer members, is a marriage between the industrial systems of American textiles & apparel and the local landscape of today's natural innovations in fibers, colors, and finishes.

As the fashion industry moves towards circularity, CCF's principles and practices provide solutions for a benevolent and renewable clothing economy. It is a labor of love for the future of fashion, and I am honored to dedicate my career to it.

For more, head over to Fibershed's 'Borrowed from the Soil' Design Challenge — I will be at the Launch Event, April 23, speaking more deeply about our soil-to-soil work and mission.

Find out more about our producer listing here: **fibershed.org/producer-directory**



 $\label{lem:california} \textit{Cloth Foundry cardigan and dress featured at Fibershed's 2022 Rooted in Simplicity Designer Showcase (Photo by Paige Green)}$

Witnessing the Cycles of Life & Death: In-Field C Section Encounter

BY RUTHIE KING OF HEADWATERS GRAZING, WILLITS, CA

The day was spent in Covelo, surrounded by the core characters in Northern California's biodynamic farming scene. We were honoring the life of Steven Decatur who, alongside Gloria, built Live Power Community Farm. It was a beautiful day, with kids and old folks spilling off of horse drawn cart rides, a maypole dance that was chaotic and tangled, an incredible spread of homegrown potluck dishes, and a whole pig roasting for 12 hours. I was 17 weeks pregnant, still feeling the first trimester "morning" sickness (which was more like an all day battle for me) and elected to hitch a ride home with friends.

As we drove down the driveway into Ridgewood Ranch, I craned my neck to see the first lamb born in my flock, 2 weeks before the "due date," who had come that morning. The sheep were grazing in a paddock I built the day before, next to the historic Seabiscuit Stud Barn. The light was starting to fade but I did catch a glimpse of the ewe and her lamb, as well





as another ewe walking on just three of her legs. I asked to get dropped off for further inspection.

This time of year, I elect to graze the neighborhood so people can watch lambs be born and enjoy the beauty and messiness of birth. Paddocks get built in people's front and back yards, communal lawns, all around the ranch. Sometimes this process unearths hidden treasure—toys lost in the grass—and sometimes it reveals piles of trash. In that day's paddock, the sheep were grazing a relatively clean and flat grassy lawn, with a couple of trees throughout.

I knew that in the process of growing a baby, my body had been losing strength and muscle tone for weeks. I was also acutely aware of the dangers of blunt force trauma to my belly, and this awareness made me more cautious and slow. Where I typically could have snuck up on a sheep, caught a back leg, and flipped her for closer inspection, I now could only get close enough to look before she ran off. So I called for help in catching this poor limping ewe, who had a piece of wood stuck to her foot with a nail. Cody came immediately, never one to pass up on the opportunity to be a hero. We devised a plan to flush a group through a narrow opening between the fence and bush, where he would be waiting and could lunge forward to tackle her.

Sheep are easier to move and catch when they are with others, much more predictable than the wild eyed chaos of a sheep singled out.

The sheep came rushing through, but they saw an opportunity to escape by running through a bush instead of past Cody. When they emerged from the other side, I could see in the dim light that one of the ewes, a different one then the one we were trying to catch, had a pink bubble popping out of her side. It was shiny, about the size of a grapefruit, and I gasped as I realized what it was—a disembowlment. I swore, gasped, and quickly started scanning through the meaning of this new emergency. The plan had to switch to catching this ewe, but she was in shock and on high alert, not about to be caught in an open field. As I headed to the barn for tools, Cody managed to tackle her and I came back to a ewe on her side behind two apartments where my friends were putting themselves to bed.

I examined the injury—it was a 2 inch gash, caused by a slice from a broken mirror hidden at the base of the bush—and cleaned it with iodine. I gloved up and attempted to push back in what was bulging out. It seemed to be a part of her four stomachs. The pressure pushing out was great, and as I pushed and she moaned I realized that even if I were successful and able to sew her back up, the chance of her developing an infection and dying slowly was very high. I knew she was pregnant, just starting to bag up, and my emotions washed over me in waves feeling sick about the loss of this ewe and her unborn lambs. But it was clear she wasn't going to be saved. I called for back up from Cody's dad, Brian, who runs the cattle on the ranch here and has helped me dispatch animals before. I asked him to bring a gun.

As we sat there waiting, my memory scanned back to a time I worked at UC Hopland with the research flock with Jim, an old timer who had seen it all. He told me about a time a ewe was close to lambing, bagging up, and coyotes got to her one night and ate her udder, leaving her alive but slowly dying. When he found her in the morning, he shot her, then excavated her lambs out of her uterus in a field C-section. They didn't make it but he said he had to try, and that you have about 60 seconds after the ewe is dead before the lambs die inside of her. I remember hearing from him how sad he had been in the past when he put down a ewe and watched from the outside as the fetal lambs squirmed inside of their mom until they eventually slowed and stopped.

I told Cody this story as we waited for his dad. He lit up and said if there was a 5% chance of it working we had to try. Any chance at all they would make it meant we should attempt it, what's the worst that could happen? I rebutted that the worst that could happen would be emotional trauma, for me especially, carrying my own fetus and raging with hormones. But I agreed that it was worth a shot. Brian brought a gun and a scalpel, called me crazy, but there we were with a distant memory of a story of how this was done, and my quick google search to confirm where the incision should be made. We rolled her onto her right side. Brian shot her and as soon as she went down I made the cut. Not knowing how deep and not wanting to accidentally cut a lamb, I sliced through layer after layer of first skin, then tissue, then unknown materials until finally I got to amniotic fluid. I reached in and pulled out a sopping wet, sticky lamb, who was warm and remarkably moving. To clear the nose and throat of fluid, I held the back legs and swung the lamb around in a circle using centrifugal force to draw the fluids out and sure enough, he sneezed and started breathing. Cody reached in while I was doing this and pulled out another, who I swung and laid down to watch take his first breath. Both lambs were breathing, but needed constant stimulation and encouragement to continue, they were premature and did not have the opportunity to pass through a canal to wake them up. We rubbed them dry, stuck grass in their noses to convince them to sneeze, shook them awake and alive.

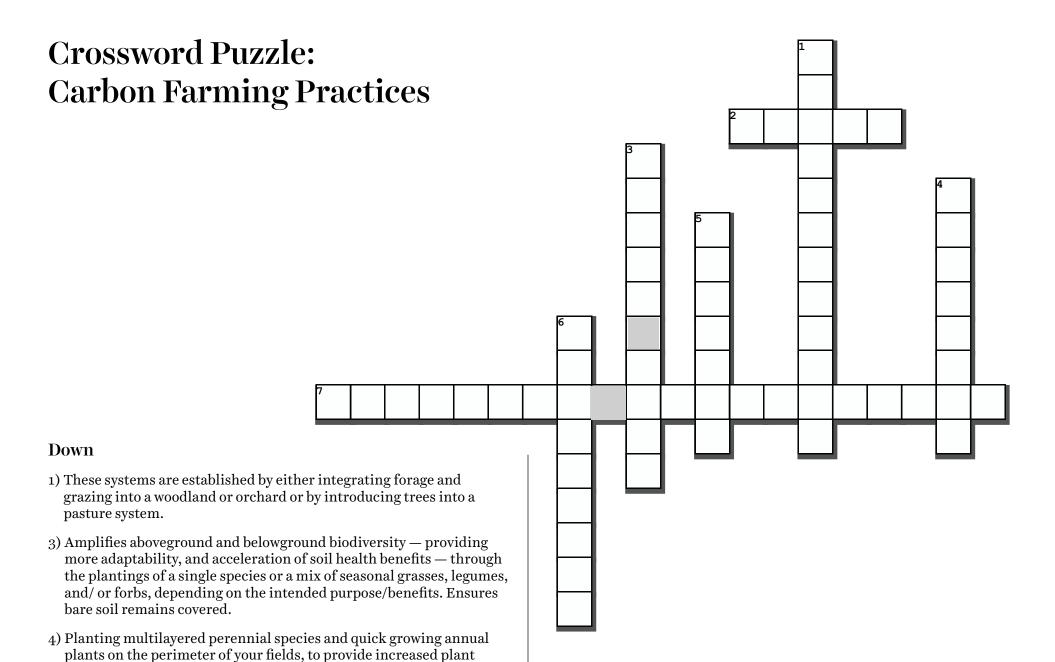
That night my parter Dylan and I tube fed colostrum every few hours in front of our heater. We were covered in milk, pee, fluids... I was 3 months pregnant and getting a taste for sleepless nights caring for helpless beings. We named them Alfalfa and Buckwheat, they dried off perfectly stark white and bonded to our donkey who would stand over them in the pasture in between bottle feedings. After a few failed attempts to graft them onto other mothers, we decided to just let them be bottle babies, and they grew up among the flock getting visited and loved by many people. Being wethers, their destiny was the freezer and the back of a couch (we raise multi purpose sheep for meat and hides) but as with the rest of the flock we determined they should live a great life up until the last minute. Because we chose to give them as close to a normal sheep life as possible, by weaning time a few months after they were born they were grazing and flocking like the rest of their peers. Buckwheat faded into the flock as another sheep with a flight zone. Alfalfa maintained his affinity for people but was never a bother when it came time to herd. They both went to Potter Valley for finishing on irrigated green grass in the Fall, where we learned that sadly Alfalfa succumbed to predation at some point during my maternity leave. Maybe it was because he was taught to be too trusting, maybe just dumb luck.

But I couldn't help remembering the many nights and countless hours caring for these lambs, and felt sad about Alfalfa's ending.

When my baby was born, he was born with a cleft lip and palate, caused by a genetic syndrome that affects his midline, and he is only able to get milk from a bottle. He takes a little extra time and effort to feed and keep alive, but no effort at all to love. We are often covered in milk and puke, less pee than when we were caring for the bottle babies, but not none. I want our baby to learn to care compassionately for the animals, taking extra time to love those that are without support or different from the others. I want him to learn that if there's a chance of saving or helping someone, even if it's slim, it's worth the effort. Each lambing season is an opportunity to learn something new and to be shown once again the incredible and fragile phenomenon of life.

My ewes are waddling now, carrying the weight of this year's lamb crop, and we wait in anticipation to see what lessons and joys and sorrows this season will bring.





Across

- 2) Great for retaining soil moisture, improving irrigation efficiency, preventing weeds, increasing soil organic matter and soil carbon sequestration, and preventing erosion.
- 7) Helps stabilize eroding banks, improve surface water infiltration and groundwater recharge, improves biological diversity with particular benefits to bird population

Answers found on page 20

Fibershed Staff **Childhood Photos**

livestock to reduce stress and improve health

wind and noise, to name a few.

diversity and forage opportunities, enhance pollen, nectar, and nesting habitat for pollinators, and screen and provide barriers to

5) End product of a managed aerobic, high-temperature decomposition

animal-derived materials, such as plant residues, tree trimmings,

manure and other organic materials in appropriate combination.

6) Has the following benefits: reduce dust, noise, windspeed; reduces

soil erosion, nutrient loss, chemical drift; and adds protection for

process suitable for beneficial application to the soil using plant and

Once upon a time....



Dustin Kahn, Learning Center $Workshop\ Coordinator$



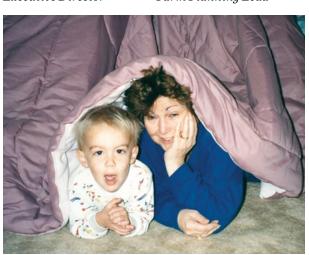
Rebecca Burgess, Executive Director



Lynette Niebrugge, Carbon Farm Planning Lead



 $Heather\ Podoll,\ Partnerships$ & Advocacy Coordinator



Mike Conover, Climate Beneficial Technician



Lexi Fujii, Membership & Learning Center Coordinator

The Hidden Story of Plastics in Our Clothes

Many of us now know that the ramifications of a plastic world are dire. From the moment it's born to the end of its useful life, plastic is accumulating in our environment; overwhelming precious ecosystems, and generating toxicity that impacts all sentient life.

What many of us may not yet know is how prevalent plastic has become in our clothing. Polyester, a plastic-based synthetic textile, is found in 60% of garments being sold today, and polyester production increased by nearly 900% between 1980 and 2014.

Fibershed's recent white paper explains how plastic solidified its place as one of the most prominent materials in fashion, we talk about what that means for all of us, and we share some of the best solutions for getting us out of this mess.

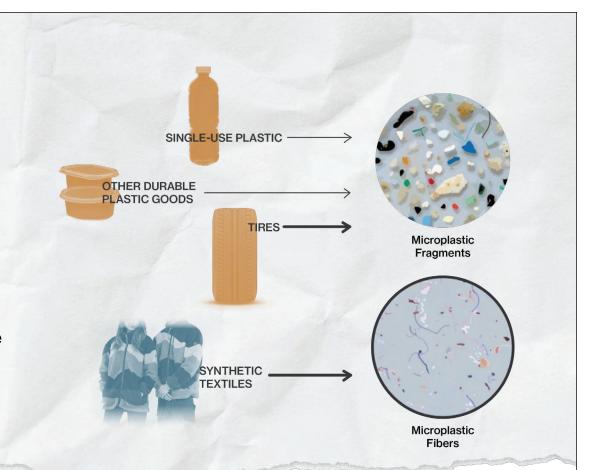
Below are two excerpts from Fibershed's Whitepaper: The Hidden Story of Plastics in Our Clothes

Get a copy of the white paper at the link below, and share with your friends and family to spread the word!

fibershed.org/plastics-whitepaper

How Larger Plastic Items Degrade Into Microplastic Particles

Textiles made from plastic fibers are responsible for microplastic fiber shedding at every stage of their lives: when they're worn, washed, and disposed of.



A primary source of microplastic pollution is synthetic fibers, produced and promoted by the apparel and textile industry.

Textiles made from plastic fibers are responsible for microplastic fiber shedding at every stage of their lives: when they're worn, washed, and disposed of. These microplastics enter the air we breathe, the water we drink, and the food we eat. They've been found in some of the deepest depths of the ocean, in the placentas of unborn babies, in Arctic snow and Antarctic ice, in human blood, in deep tissue of human lungs, and in our rainwater. In fact, all plastic that has ever been manufactured (unless toxically incinerated), is still present within our Earth's biosphere and ocean. ¹³

A study of microplastic pollution around the North Pole recently found that more than 73% of microfiber pollution can be traced back to polyester fibers that resembled PET from textiles.¹⁴

As mentioned above, PET (polyethylene terephthalate) is the chemical name for polyester, and it is also a clear, strong plastic used in food and beverage packaging. The increasing popularity of recycled polyester made from plastic bottles and sold as a "sustainable" textile material has led to vast amounts of microplastic pollution.

Transforming a plastic bottle into an abradable textile immediately begins to transform that plastic into microplastic pollution — much faster and more widely dispersed than would happen otherwise. Additionally, recycled polyester has been shown to emit more microplastics than virgin polyester.

The Hidden Story of Plastics in Our Clothes

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READY TO MAKE REAL CHANGE?

Here are some steps we can take to decrease plastic's chokehold on the apparel industry:

Learn to mend clothing.

Reduce your overall consumption of clothing and textile products. Overproduction and overconsumption driven by abundant and cheap plastic fibers feed the root of the fashion industry's human rights and environmental offenses. Want to extend the life of your favorite garment? Learning to mend can be a game-changer.

Buy less and wear natural fiber products.

Only shop for new items when absolutely necessary. When you do make textile purchases, buy and wear natural fiber products, especially those originating from land-based production systems that are working to restore and build ecosystem and soil health.

Take care when planning your laundry day.

Care for clothing gently to prolong its life and reduce ongoing microplastic emissions: wash clothing less often, use gentle cleaning products, cold water, and hang to air dry. (Find some helpful tips starting on page 3 here.) Research on laundry systems around the world has shown that natural fiber clothing requires less frequent washing.

Support government policy changes.

Support development of government policies requiring greater transparency about textile and fashion system impacts on labor, environment, and communities; including Extended Producer Responsibility (EPR) programs that address microplastic emissions and plastic waste from synthetic textiles. Policy reform is necessary to level the playing field for natural fibers in the global textile system.

Support public investments.

Support public investments in healthy natural fiber production systems and in rebuilding the natural fiber industry's regional and domestic processing infrastructure, including financial, technical, and regulatory support.

Find your local Fibershed Affiliate

Find your local Fibershed Affiliate and get involved to help grow regional natural textile systems that support community and ecosystem health.



The Hidden Story of Plastics in Our Clothes

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This tenth volume of the Fibershed Producer Newsletter is designed to be a space to re-acquaint and connect, as well as refresh ourselves on the who and what of our projects and collective efforts. We look forward to hearing from you about what kinds of information sharing, column ideas, poems, art, doodles, updates on your family and business, and notes from the field that you'd like to offer for the next publication. Newsletters come out twice yearly, and our next edition will be sent in March, 2023.

Ongoing Public Notice: Do you have an internship, residency, ongoing course or service that you offer? We will again include a Producer Classified Section in our next newsletter.

Classified ads, stories, artwork, and updates as well as your thoughts and visions, should be emailed to **lexi@fibershed.org**. Feel free to submit both your ideas and your classified ads between now and August 1.

Answers

Crossword Puzzle: Carbon Farming Practices

Down

Across

- $\scriptstyle 1)$ Silvopasture
- 2) Mulch
- 3) Cover Crop
- 7) Riparian Restoration
- 4) Hedgerow
- 5) Compost
- 6) Windbreak

20

Producer Stories



Choreographing Change with Marie Hoff of Full Circle Wool

WRITTEN BY SASHA WIRTH PHOTOGRAPHED BY PAIGE GREEN

Originally published on the Fibershed Blog on January 6, 2023

Step by step, it's coming together," says Marie Hoff, gazing out over the pasture where her flock of Ouessant sheep graze alongside pecking hens. A plucky rooster keeps a beady eye trained on her as she begins to walk the perimeter of her property – a 2.5 acre homestead in inland Mendocino County – pointing out all the climate beneficial practices she and her husband have been steadily putting into place.

From the introduction of chickens this past summer to revitalizing an old water tank, Marie is determined that each decision be carefully considered and aimed towards supporting healthy land management. This mindset epitomizes both her personal values and the way she runs her business, Full Circle Wool – a wool goods and grazing company.

"Look at this!" she grins, bending down to delicately touch a sprouting brassica plant. It's the first hopeful sign that the extensive cover crop she planted is taking root. "The soil was incredibly compacted when we bought the property five years ago," Marie explains, "struggling with stunted grass and invasive annual varieties. But we are trying to help it heal from over-enthusiastic mowing, and it's exciting to see how quickly the land is responding."

Two grants have been instrumental in helping Marie make significant strides in improving her land. Selected for a Carbon Farm Seed Fund grant through Fibershed, she used the funds to jumpstart the revival of her land with a rainwater catchment system. With this setup, Marie will be able to use the rainwater for growing cover crops and perennial plants, which create better nutrient cycling for the land with their deep roots. In addition, a Healthy Soils Program grant through CDFA (California Department of Food and Agriculture) enabled Marie to apply compost to begin the process of fortifying and restoring her soil.



Throughout the process of applying for the grants and studying land management, she learned about the vital role of diverse microbes in the soil, which prompted her to add chickens (their manure helps counteract parasite overload on the land that could come from just having sheep).

She's also started planning for hedgerows and a silvopasture. "Having a lightly wooded grassland with fruit and nut trees will be good for additional nutrient cycling and water flow, and offer shade and treats for the animals," she adds eagerly.

A curious sheep trots over to investigate what Marie has found on the ground. She is a dark and quick animal, part of the rare heritage Ouessant breed that lays claim to being the smallest sheep in the world. In addition to being known for their size, Ouessant sheep are also valued for their deep jet-black wool, and for being healthy, hardy and non-picky browsers. These qualities make them wonderful compact grazers – a quality that first caught Marie's attention long before she purchased her property, spurring her to buy her first seven sheep in 2013.

"They were offered to me to purchase, but I didn't have my land at the time. However, I did find a temporary place to put them and decided just to forge ahead!" she laughs. "It was a bit of a wild move and a long shot! Of course, I learned as I went, though I don't recommend doing it that way."

With a passion for sheep steadily building over time, Marie immediately saw the business potential – contract grazing, to be exact – and seized the opportunity to partner with Leslie Adkins (a friend, fiber artist and farmer) to obtain those first sheep. Together they invested in and brought out a small flock from the East Coast, and a friend offered to let Marie's sheep live on their land (while Leslie's went to live at her then eco-farm in Santa Rosa, and have since moved to Illinois). In late 2013, Capella Grazing Project, named after the shepherd's star, was in business.

Offering weed control, land clearing, fire prevention and fertilization services to areas like vineyards and other private properties, the business began to establish itself. Through breeding efforts, the flock began to grow and is now the largest flock of Ouessant cross sheep in the West. But this was only the beginning for Marie.



Growing up, she'd never envisioned herself as a shepherd. With a degree in Dance and Performance Studies, Marie assumed she'd spend her days leaping and turning in a studio or onstage, rather than tromping through pastureland with wooly companions. But the recession hit soon after she graduated in 2005, and work in the arts became difficult to come by.

"It was sobering. I looked at my degree and thought 'What am I going to do with this?'" she recalls. To make ends meet, she took on a series of odd jobs — catering, local community performance work, and vending at the farmers' market.

"I was living a young person's bohemian lifestyle in the Bay Area, which was fun, but it could only go on for so long," she says. "Years passed and it was 2012, and I was still asking myself 'What am I doing?' Something needed to change."

The first shift came in reframing the question she'd been asking herself, which turned her life in an entirely new direction. "It was my lightbulb moment. I began reflecting on 'What would I do if I could do anything?' And the answer was fast and clear. I wanted to work outside on a farm."

Working at the farmers' market had brought her tremendous enjoyment, and through her contacts she found opportunities to visit farms and homesteads. "I began to learn so much and was exposed to different types of agriculture. But being around sheep and herding them particularly drew me in. There was something special about moving and exploring the land with them. It was my rabbit hole opening," she smiles, her blue eyes shining, "and I've been going down it ever since."

To read the rest of the story, visit: fibershed.org/2023/01/06/choreographing-change-with-marie-hoff-of-full-circle-wool/



Herderin Begins with the Body and Soul

WRITTEN BY STEPHANY WILKES PHOTOGRAPHED BY PAIGE GREEN

Originally published on the Fibershed Blog on February 27

A lexandria "Alix" Vasquez of Herderin begins with the body, not the garment.

"What if garment consideration began with asking: Where would you like to be held? Where would you like to have some more support? Feel some weight around your shoulders, or something snug around your low back or abdomen? Could a garment play a role in healing you? Could it feel like wearing a parent's clothes? What can clothing do for us, emotionally?"

The very idea conveys a sense of relief and, given what humanity has experienced the past several years, feels especially refreshing, relevant, and welcome – as do Herderin garments. Designed, cut, and sewn in San Rafael, California are deliciously nubby, textured, wide-leg pants made for movement. Denim pants get their pleats from wrapping and vary by wearer. An "extra" set of sleeves at the waist of a luscious, cream colored, mid-calf-length dress crosses the front of the abdomen.

"It's 'How does a wrap feel?', not 'How does it look?'" Alix clarifies. "I want to create a sense of embrace around the body, the emotional frame, not just the physical. How can I comfort areas of the body that feel and store emotions, like hips? The best thing I can do is wrap them in clothing, to support them."

Alix's body primacy and thoughtfulness resurrect the priorities that drove the creation of humanity's first garments: what a particular body needed based on a person's activities and lived experience, their local climate, land context, and available fibers. It is why we see wool caftans in North Africa, sheepskin coats in Eastern Europe, and why women in many cultures wrap their hips and abdomens tightly after giving birth.

And it perhaps explains why men are finding their way into Herderin's long merino dress.

"I don't know how many wear it out of the house," Alix laughs. "It's not necessarily about gender but what feels good. Men are slowly waking up to toxic masculinity and how it affects them. They haven't had clothing options. Men's bodies and wardrobes are so identified with the kind of work men do for others, like suits, and that is very limiting. Even having the space to wear a flowy pant...It's not only for martial arts class. Or maybe someone doesn't always want to wear pants. Men are thinking about sustainability too, so I think they are asking: Given all that, what's available to me?"

It's a tension between what's normal vs. what feels good, which Alix examines in her designs. "Something shifted for me at a conference in Iceland," she explains. "People had wool blankets and wore them as coats. In the U.S. we see someone do that and think 'Oh, you must not be dressed,' but in Iceland, it's just always been. It's beautiful, simple, elegant; utmost sophistication. It's normal. But I know men who won't wear what they feel most comfortable in because they would stand out. Can we say this is normal now, so they can be comfortable?"

Herderin's philosophy and values are so far from those of modern fashion that the moniker does not feel like it applies to Alix's work, and it has always felt that way to Alix, too.

"Fashion was so much not a fit that fashion is what kept me out of the field," she says. "I didn't think I fit in fashion, don't think I fit, because of what it prioritizes. The system of fashion is not working, for the planet or for us. Fashion brands, whether big or small, spend a great deal of energy on design and production, and if this system worked-this standardization--people wouldn't be so drawn to the alternatives as much as they have been in recent years."

Garments not working became a personal issue for Alix early on.

"In seventh grade, I was 6' tall," she laughs. "It was always clear that clothes would not work for me, as-is. I asked my mom for a sewing machine because I was putting things together with safety pins, and she gave me one."

More quietly, Alix adds, "My mom was a single parent, so I never got to spend a ton of time with her. I got to spend physical time with my mom by wearing her clothes: they had my mom's scent, my mom's energy. It reminded me of being protected. Sleeping in one of her huge shirts...it was the best shirt. Designing from a place of deep physical comfort has been deeply healing for my childhood."

Alix always wanted to go to school and study design but was so unlike "the fashion kids going to FIDM" that she didn't. She moved to New York, attended the New School, focused on social justice, and had friends in fashion who dressed to be seen.

"And I didn't want to be seen," she says. "What gives someone the right to comment on my body? In New York that was possible, to not be seen, to fade into the scene."

After graduate school in Richmond, Virginia, Alix landed in Boston, "where I really did not fit in with traditional academia as a PhD student," she says. Thanks to encouragement from a partner and twin flame, Alix's interest in the intersection of clothing and emotional experience came into focus. In retrospect, this period looks like a harbinger.

"My partner said, 'You always said you want to make clothes.' We bid on this vintage Husqvarna sewing machine, won it, and it shipped to the house," Alix recalls. "And I was not looking back. That was in 2013. The pleasure of not having to shop, and I can just make? I save so much time and life not looking around for things and instead put it into developing skills. Sewing is such a fundamental skill."

Alix also started a nonprofit based on sociological research she conducted at MIT, on how seeing one's self in others aided people during emotionally challenging times.

Today, Alix says she feels more like a chef.

"The fabric is the same as food. It's about sourcing, supporting locals I've come to know, using the beautiful harvest, and letting the best ingredients speak for themselves. How much closer can I get? Sense of place is really important to my work."

Alix continues, "When I lay out fabric on the cutting table, it's a very important part of my process. It's where I take the most time. I think about the person it's for. It's more like rolling out dough: I want to cut into it as little as possible. I don't want to manipulate the fabric too much. It took a lot to get here. It's like a being, as pure as it can be on its own. I want to be responsible, give the fabric honor, use as little manipulation as possible to get to longevity, comfort, emotion."



Alix recently started working with Climate Beneficial Wool and wants to source fabric from as close as possible, she says, "not because of 'Buy American!' or something like that. I'm half Puerto Rican and half Iranian. But because it's superior stuff. Why go farther? Going local is the only way we can know. I can see the sheep. I know the wool is here. And all you do is shear it! It's all-seasons wear, it grows every year, it's gender fluid, it's for everyone. I live in wool."

As Alix's standards have gotten higher, Herderin's path has admittedly become more challenging in some ways.

"Margins are hard," she explains. "I can't do one-thousand-yard minimums, for example. The question becomes, 'How can I get that, from this farm, at a scale I can afford and work with?'"

But Alix is quick to focus on what matters, and the reward.

"I divorced myself from a productivity-centered mindset. It's such a kind feeling when someone says 'I love what you're wearing', because of the heart that went into it. The aesthetic is simply the outcome of all the work that came before, of this deeper emotional work: This comforts me. This body is for me. This clothing is for me."

Herderin creations are available online at Herderin.com. In mid-March 2023, their Climate Beneficial line will be released for current and future stockists, and for anyone who would like to pre-order garments. For updates and information about the release of Herderin's Climate Beneficial line, signup for their newsletter here.



A Love of Design: Kosa Arts

WRITTEN BY MARIE HOFF PHOTOGRAPHED BY HUBBARD JONES

Originally published on the Fibershed Blog on February 9

"Some say the creative life is in ideas, some say it is in doing... It is the love of something, having so much love for something – whether a person, a word, an image, an idea, the land, or humanity – that all that can be done with the overflow is to create." – Clarissa Pinkola Estes

Elaine Hamblin — designer, pattern maker and sewer — lives at the threshold between land and garment. Her domain stretches from idea to functional item, connecting locally-grown fabrics with wearers in need of clothing. She often begins by solving for her own personal needs, and then sharing that solution as part of a collection of clothing available to the public. Her designs are based not on what is superficial and trending in the fashion industry, nor what will sell the quickest, but on what materials are available from local producers and deadstock natural fabrics, and how it can meet people's real needs, balanced with her design aesthetics.

Elaine started sewing as a child, making dresses for her dolls. Her mother sent her to Singer Sewing Camp ("boot camp for sewing," she calls it), which, though it taught her a lot at the time, delayed a deeper dive into clothing until after college. During college at CCA (California College of the Arts Elaine studied fine arts in many forms: sculpture, weaving, hand painting and printing on fabric, and natural dyes, among other things, which brought her back towards clothing. Later, as an assistant for Japanese-American designers, she developed an interest in Japanese clothing design that remains present in her work today, decades later. She began designing costumes, and often worked on costumes for Bay Area dance companies, especially aerial dance, whose dancers move through the air perpetually, often at high altitudes, displaying fabric at every angle.

"In trying to be creative, what I start with may seem ordinary and familiar, and then transform into something else, something unfamiliar," she explains; it's art-to-wear. But it's not just about art. There are the systems that produce the art materials. There is the current mire of people and planet, and the exploitation of both that clothing must also address. For Elaine, "design can be something that initiates a conversation" about the impact of fashion and its current system of waste and exploitation. She seeks another way, often treading against the strong currents of fast fashion in the opposite direction. Her interests lie in offering truly sustainable garments, raising awareness about how materials are grown, and the meaningful livelihoods of garment workers.

"I say that 'Why is it so expensive' is not the question; the question is 'why is that so cheap?' Why are we paying less and destroying people's lands and cultures? We're in a culture where we love a bargain. That makes it hard to evolve into a culture that uses just enough and values people's labor, not just a company's bottom line," she states firmly. Having seen firsthand what is sacrificed for a company's bottom line, Elaine remains resolved to do things her own way. After spending nearly 20 years working in the corporate world for companies like Esprit, Gap, Levis, and Gymboree — which took her to other countries that manufacture clothing and develop sustainability measures — she began her own venture, Kosa Arts.

Started in 2014, Kosa Arts blends Elaine's interests in clothing and interior design, producing apparel in small-batch quantities with great attention to sourcing, construction, and of course, design. For Elaine, sewing the full garment instead of relying on piecemeal mass production honors the craftsmanship that goes into constructing clothing, which necessarily values the garment worker doing the constructing. To create clothing that relates to the ecology of the place she lives, is to value the health of the environment and the health of the garment worker and the wearer themself.



"Sometimes you don't know the difference until you work with the difference," she notes, speaking of Sally Fox's breathtaking heirloom and organic cotton fabrics. These fabrics "have life in them, the feel and the smell of them, the vibrancy of color," and are classically-bred and naturally-grown. Comparatively, other gmo-cotton or synthetic fabrics feel lifeless. The process of making is important, of working with fabrics that are alive and healthy. Elaine's clothes are not about the 'just get it done' mentality of manufacturing; they are a creative, and often revelatory, process: a process whose qualitative difference becomes evident when wearing them.

With a desire to relate more deeply to her natural landscape, Elaine's love of design transforms materials from her local fibershed into useful, functional garments that take care of the wearer, the worker, and the planet. Her insights into process and the systems that clothe us shine a light toward a future of design that values life over the bottom-line.

To learn more about KOSA Arts visit www.kosaarts.com and follow @kosa_arts on Instagram.

You can also visit Elaine at Werkshack, a collective workspace and gallery open to the public on Saturdays 12-5p (481 25th Street, Oakland, CA, 94612), and on Sundays at the Temescal Farmers Market in Oakland.

Producer Classifieds





Home of Deep Creek Yarns, Navajo Churro Rug Yarn — natural colored and natural dyed

We are the flagship store for all of Lani's Lana ~ Fine Rambouillet products. Save on the shipping, come and visit the store.

459 South Main Street, Cedarville CA www.warnermtnweavers.com warnermtnweavers@gmail.com 530 279-2164

Upcoming High Desert Fibershed Learning Center Workshops:

To sign up for a workshop: warnermtnweavers.com/shop

Natural Dye Retreat • May 18th-20th Indigo and Rust: Botanical Printing Techniques



- May 18 & 19, 2023 / Warner Mountain Weavers
- \$160 workshop fee, plus \$40 materials fee
- Instructors: Louisa Hunter, Jeanne Kaiser and Lani Estill
- Limit 10 students

Join us for two days of eco-printing combining Indigo, Rust and Botanical Printing. Come with a white cotton or linen T-shirt that you love to wear and fits well. We will recreate it into a masterpiece of wearable art using Indigo, rusty pipes, and plants. Once we have the basics down on day one, we will spend the second day creating one or two more pieces using botanical prints on Climate Beneficial Wool fabric. You will be making eco printed fabric that can be made into a pillow, wall-hanging, handbag, or a scarf. The third piece is optional, and we will have project blanks available for purchase.

Plants make beautiful prints and you will be astonished at the results you can achieve from the local flora and fauna.

Instructor Bios:

Louisa Hunter and Jeanne Kaiser: Jeannie and Louisa, each with their own background in textiles and fiber arts, met at a workshop in 2019, forming a fast friendship. Currently they share a studio and focus on botanical printing, testing and trying out different techniques. In their practice they use all natural fibers along with natural dyes, tannins and plants. With Jeannie's love of plants and gardening and Louisa's infinite curiosity, the possibilities are endless and experimentation is at the heart of their work.

Lani Estill: Lani is the founder of Lani's Lana ~ Fine Rambouillet Wool. A commercial wool business and small yarn line. Lani offers yarn that is heaven to knit and a joy to dye. She has a transparent supply chain and is certified Climate Beneficial™. Her yarns are mostly naturally colored (blending creates the different natural colors) or naturally dyed with botanicals. Lani is a natural dyer and loves to teach others what she is learning herself. Some of her past classes are: Indigo, Madder, simple Shibori, natural dyes using powders, extracts and bugs, fleece washing and preparation, and yarn making.



Spinners without Rules aka SWOR

Free. Just show up! Meets the 2nd Saturday of every month at Warner Mountain Weavers

Dust off that spinning wheel or borrow one of the shop's wheels and join us for an afternoon of spinning and sharing projects, ideas and techniques.

Crochet Classes

2 Saturdays a month, 10 am-12 noon / Warner Mountain Weavers Instructor: Barbara Spears

fee: \$35

Barbara Spears will teach both single and double crochet, how to read patterns and help with ongoing projects. This class is for beginning crocheters and a good refresher for those who want to pick up their crochet hooks again.

Beginning Spinning

April 1, 10 am-1:00 pm / Warner Mountain Weavers

Instructor: Melissa Harris Fee: \$48 plus \$10 materials fee

Limit: 10

Learn to spin, using one of our spinning wheels or bring your own and local wool. You will learn how to spin, as well as basic wheel mechanics and an introduction to turning fiber into your own handspun yarn.

Drop By Knitting — Free just show up!

2 Saturdays a month, 1-3 pm / Warner Mountain Weavers Check website for dates each month

Instructor: Adrienne Johnson

If you want to LEARN TO KNIT, are stuck on a project or if you just want to come and knit or crochet and enjoy a cup of tea or coffee. Join us!

The 23rd Annual Woolgathering

Spin • Weave • Knit • Dye • Sew September 14-17th / Save the Date!



Exploring Northern California Fungi for Natural Dyes

- Saturday May 20th, 10 am-4 pm / Warner Mountain Weavers
- \$100 workshop fee, plus materials fee \$12.50 (includes Fibershed yarn and Climate Beneficial fabric)
- Instructor: Elissa Callen
- 8 student minimum / 15 maximum

Explore natural dyes using Northern California fungi! During this workshop taught by Elissa Callen, we will go over how to hunt for local dye mushrooms, ethical harvesting, prepping your fibers for dyeing, and how to achieve a variable range of color even with just one species through different common natural dyeing techniques. One of the many gifts of living in Northern California is the wealth of local dye fungi!

All dye mushrooms will be provided, but if you're curious to test mushrooms of your own, students are welcome to bring their own mushroom samples and we can all examine them together and assess for viability. (If your mushroom is not fresh, please bring several photos of where it was collected and how it looked fresh in order to help with identification. You can also upload to iNaturalist ahead of class to help with ID, which is recommended.)

Students will leave with fabric samples of the different dyes illustrating the breadth of color attainable from the fungi species selected for the workshop. Students are additionally welcome to bring modest fabric pieces of their own to dye in one of the provided larger dye pots (natural fibers only, wool and silk recommended for best results).

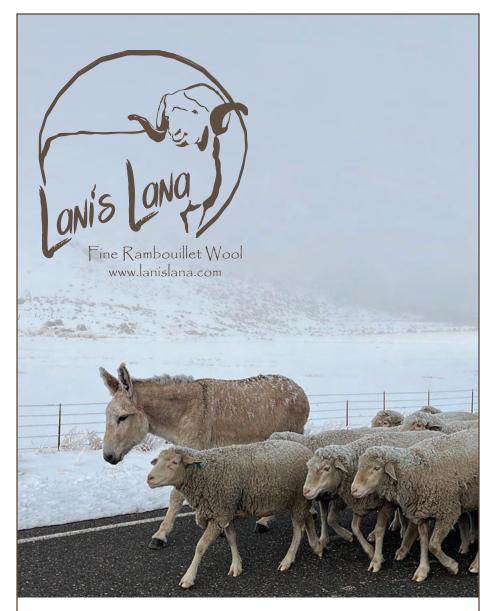
The class will also briefly touch on an array of other mushroom uses to consider when you're collecting out in the forest, including making pigments for paint and spotting common edibles in the same areas as your dye mushrooms.

Please bring your own lunches! Small bites made from hand foraged mushrooms will be shared by Elissa.

Instructor Bio:

Elissa Callen is an artist working with local plants and fungi to make natural pigments, inks, and dyes that she further uses as the staple materials in her art practice. She holds a degree in fine art, has a professional background in horticulture, and nearly ten years of experience researching and practicing sustainably using natural materials for color. She is passionate about California ecology and believes in using her work with natural materials as a means of increasing community interest in environmentalism and connectedness to the native landscape. *Instagram:* @slateandrust





Lani's Lana ~ Fine Rambouillet Wool

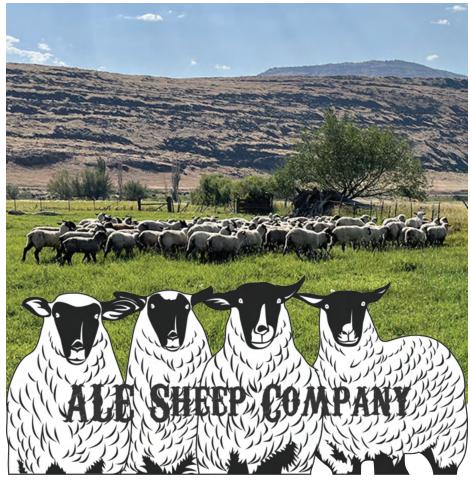
Lana strives to bring you only the best wool products using 100% Climate Beneficial Rambouillet Wool. We continue to create Yarn, Combed Top, & Fabric using our sheep's wool raised in Northern California. We also have a line of hand made, one of a kind, pillows and blankets.

Shop on our website or come check out our store if you find yourself in Cedarville CA! Thank you for your kindness and support to our business!

Website: lanislana.com
Email: Laniswool@gmail.com
Social: @Lanislana_wool







Modoc/Lassen County, CA

We raise Suffolk sheep in the Great Basin. From our sheep we sell regeneratively grown and pastured lamb meat, sheep hides, and premium range rams. We are excited to soon offer felted wool items, and tallow balms! Thank you, from our flock to yours.

Website: alesheepcompany.com
Email: alesheepcompany@gmail.com
Social: @alesheepco



Pacific Knitting Retreats Presents:

Sheep to Skein — from Shearing to Yarn

April 29, 2023 / Ukiah, California

Yarn design is underappreciated by most knitters — and yet it is an essential part of understanding how a yarn you select will work for you and your project. The attributes in your yarn's production process (energy, twist, ply, grist, fiber characteristics) are not listed on the label like fiber content and yardage, or as clearly visible as dye and colour, but they are just as important.

Sarah and Matthew Gilbert of Mendocino Wool and Fiber, Inc. have deep roots and connections that give them a unique understanding of the diverse local flocks and their fleeces. The yarns they create defy conventional wisdom in many ways and it lends them unique properties and energy you could never replicate in a mass produced product. They are round, soft and complex and bring their character to every stitch. I am excited for them to share their knowledge and introduce us to both the process and the results of such artisanal

fiber literally from sheep to skein. Red Creek Farm is one of the farms that Mendocino Wool and Fiber, Inc produce yarn for — from shearing to skein — and we are delighted to be able to include the Farm in our project.

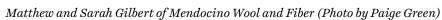
Peggy Agnew and Jonathan Whipple are the owner/operators of Red Creek Farm located in Potter Valley at the headwaters of the East Fork of the Russian River in Mendocino County. Red Creek Farm specializes in a unique four-way cross bred sheep: Cormo x Lincoln x Merino x Wensleydale. The result is a remarkably long, strong, lustrous, and soft wool especially desirable amongst handspinners.

It is with great pleasure I invite you to spend a day at Red Creek Farm and meet Peggy and her sheep (and YES, there will be LAMBS). Matthew will explain and demonstrate the ancient and essential craft of sheep shearing and Sarah will take us through the process of yarn design ... starting with the skirting directly after shearing — and onto the final products.

It takes about 2 hours driving time from the Golden Gate Bridge, 2 1/2 hours from Sacramento or Oakland to get to Potter Valley. For those who would like to spend a night or even two, there are overnight accommodations in Ukiah and I will gladly host a knitting circle at the historic Vichy Springs Resort for those who would like that.

 $For more information and to enroll, please email \ Gayle \ Ravenscroft \ of \ Pacific \ Knitting \ Retreats \ at \ gayle @pacific knitting \ retreats. Compared to the property of \ Pacific \ Knitting \ Retreats \ at \ gayle \ Bayle \ Ba$







Peggy Agnew with her sheep and many colored fleece (Photo by Brittany Cole Bush)



Alpaca Manure

Fresh or lightly composted alpaca manure is mild enough to top dress your plants, but nutritious enough to enrich your soil. Bring your truck, we'll load it for you. By the pickup load (4-5¹/₄ yard buckets) or trailer load - \$40 per load/yard.

Alpaca Rentals

For Weddings, Special Events, Photo Shoots. Make your occasion special and fun! Call or email for pricing.

Alpaca Products

Alpaca fleece, roving and yarn for your next project. Natural colors: white, light fawn, brown, silver grey, rose grey and black. Visit our farm store for best selection. Appointments required.

Deb Galway, Vacaville, CA 707.290.7915 deb@menageriehillranch.com





Bodega Pastures Intern Program

Bodega Pastures has been working on an intern program and had our first 2 interns in 2022. We invite resumes from people interested in working with us and 200 sheep for 6 months in 2023, starting in spring.

If interested, email hazel@bodeganet.com or call/text Alyssum at (707)480-0655 for more information.



Wet Rolled Felting Machine Available

Gentle Rolling machine for sale! — \$1500.00

Model GR1400FD • Used one summer • Has fulling drum
If interested, contact Tim at **Timefelt@gmail.com**Timothy Easterbrook, Mendocino County, Ukiah

Carol Miltimore Consultation

Berkeley, CA

Carol Miltimore is now offering consulting services through her brand Seek Collective. Miltmore has 20 years experience working in fashion design, including designer, couture, independent and contemporary. For the last 9 years she has dedicated herself to what it means to truly be sustainable in the apparel industry and throughout its supply chain. She offers design direction, research, production calendars, and sketches with technical packages as well as fabric sourcing in India focusing on hand block printing, natural dyeing, and handloom weaving.



You can reach Miltimore at **consulting@seekcollective.com** and see some of her work at **www.carolmiltimore.com**.

ent) that will be sequestered over the next 20 years ices producers have implemented since ficial Program started in 2016 estimated amount of carbon dioxide (or equival as a result of the carbon farming prac Fibershed's Climate Bene

C C

currently enrolled in the Climate Beneficial Program

Carbon Farming practices implemented in 2022



Fund Report 2022 Carbon Farm

total of 162 carbon farming practices in 2022, accounting for an estimated 18,566 Program collectively implemented a already and $23,422\,\mathrm{Mg}\,\mathrm{CO}2\mathrm{e}\,\mathrm{drawdown}$ metric tons (Mg) of CO2e sequestered Producers in the Climate Beneficial Program collactivals in an analysis. projected over the next 20 years.

practices such as cover cropping were the most commonly implemented practices. such as prescribed grazing, and cropland Producers practiced prescribed grazing on almost 90,000 acres, accounting for an estimate 13,606 metric tons CO2e. Practices carried out on grazed lands

on rangeland is responsible for the largest carbon impact, sequestering an estimated Program since 2016, compost application 67,870 Mg CO2e over the next 20 years. Over the life of the Climate Beneficial

COMET Planner, COMET Farm, and data calculated using COMET Planner, CDFA Carbon sequestration estimations were $sourced from Ryals \ and \ Silver \ (2013).$

Above: Planting a line of fig trees at PT Ranch (Photo by Paige Green)

small ranches we operate on something of an 'economic edge' and the compost application onto sheep pastures. We are very grateful to the financial aid granted by the Fibershed truly has been a boon to our Fibershed and honored to have been awarded a Carbon Farm Seed improvement of soil health, a high priority for our ranch has been Fund Grant to purchase compost for nearly ten acres. Like many "Among our several goals for atmospheric carbon draw down and $ranch\ operations."$ - Lynn & Jim Moody of Blue Oak Canyon Ranch

Plains, New York Hudson Valley, and the

next 5 years: California, Northern Great

Fiber program in 4 regions over the

support offered to Black cotton farmers.

Southeast cotton belt, with particular

in the pipeline Climate **Climate Beneficial** C C **Producers** 69 Climate

Transitional Beneficial Beneficial Verified:

Producers: New

Climate Beneficial Program 142,503

integrate carbon farm planning, carbon

drawdown calculations, mapping, and

producer specific practice monitoring.

Read more here: bit.ly/usda-grant

open source Carbon Farm Planning and

Verification Online Portal, which will

carbon farming projects, and create an

capacity for Carbon Farm Planning, directly fund producers to carry out

The project will expand regional

Climate Beneficial Verified New Producers

Acres Enrolled in the

38,301 1,220

Climate Beneficial Transitional

Our 2022 Carbon Farm Seed Fund

farming projects. The most common projects were applying compost fencing to facilitate prescribed grazing. We estimate these projects will to rangelands, seeding pastures, planting hedgerows, and purchasing we awarded over \$120,000 to 29 producers to fund their carbon Program to implement carbon farming practices. In our 2022 round Fibershed's Carbon Farm Seed Fund was created to provide direct financial assistance to producers enrolled in the Climate Beneficial draw down 7,660 Mg CO2e over the next 20 years.

This year Fibershed, in collaboration

Scaling the Climate Beneficial

Flax (Photo courtesy of Sandy Fisher)

Program in four regions

throughout the US

Climate-Smart Commodities grant. The

project, called *Climate Beneficial Fiber*:

Building New, Accessible, and Equitable

L with 5 project partners applied for funding from a USDA Partnerships for

Market Opportunities for Climate-Smart

Cotton and Wool, was awarded \$30

million to scale the Climate Beneficial

Cumulative	\$246,506	61	1,776	11,911 Mg		
2022	\$121,935	29	860	7,660 Mg		
	Amount awarded	Number of projects	Projectacreage	20-year CO2e drawdown		

Right: Outlaw Valley Ranch was awarded a Carbon Farm Seed Fund grant to purchase prescribed grazing over 345 acres. (Photo courtesy of Alex and Kelsey Karol) portable electric fencing to carry out

of Climate Beneficial Program rawdown by Category: Cumulative CO2e D 2022 Practices and Entirety

Total Since 2016

2022 Practices

30

No till

Residue and tillage management

Conservation crop rotation Nutrient management **GRAZING & PASTURE LANDS**

Strip till

Prescribed grazing

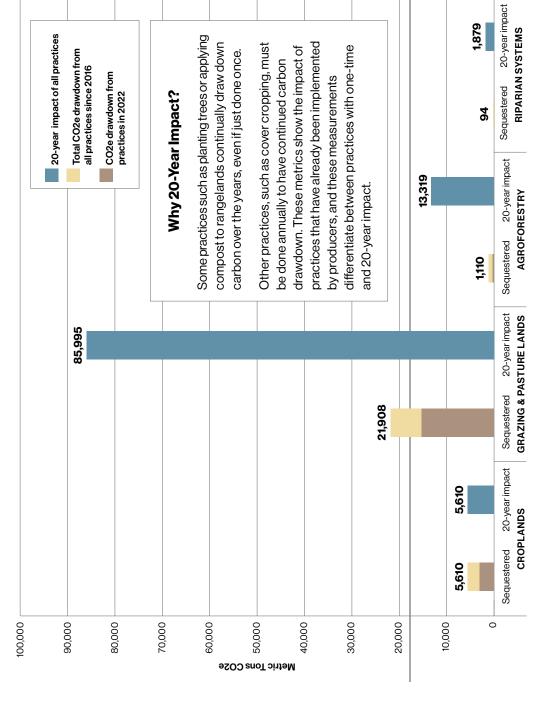
Compost application on rangeland

Cover crop

CROPLANDS

Compost application to cropland

Carbon Farming Practices Implemented — 2022 and Cumulative



36

25

Hedgerow

Silvopasture

Tree/shrub establishment

Windbreak & shelterbelt

Mulching

42

26

Range planting

Forage and biomass planting

AGROFORESTRY

22

ranch! Very exciting! We also were awarded funds truck load of gold when you are tending sheep! We We were granted funds for 40 acres of clover seed the edge of our pasture. We chose white oak trees to effectively practice rotational grazing here at and pasture mix, which could be compared to a were also granted funds for tree planting along bank of sudden oak death resistant oaks on our which will provide summer shade and autumn We are so grateful for the support of Fibershed. for more movable electric fence which helps us feed for our sheep as well as increase the seed Bodega Pastures."

- NASTASHA MCGUIRK OF BODEGA PASTURES

What is Mg CO2e?

or "megagrams") and is equal to 1000 kilograms or about Mg refers to metric tons (also known as MT, "tonnes," 2,240.6 pounds. It is a common way of quantifying and

unit, where 1 Mg CO2e is the global warming equivalent CO2e (or "carbon dioxide equivalent") is the standard carbon dioxide) using "CO2e" allows the impact of all for example causes 25 times more warming than Because different greenhouse gases contribute of 1 metric ton of carbon dioxide for qua

on our property. These effects naturally extend to This will allow for the rapid response to climate and overall microbial health of the whole system and will be crucial in the ecological restoration and productivity on our land. The extra funds that is so desperately needed ASAP; as well as greater food security (especially as a disabled farmer group), healthier animals and plants of years, rather than over many, many years. change, improved soils, and water cycle health will allow us to restore NOW, and in a couple "The Carbon Farm Seed Fund Grant has been

> Critical area planting Grassed waterway

RIPARIAN SYSTEMS

Riparian forest buffer Riparian restoration

Windbreak & shelterbelt renovation

Alley cropping Mulitstory cropping

such wide reaching consequences. Thank you to "These Grant funds are extremely important in and wildlife systems at the root level, and have excellent and vitally important opportunity." all of our supporters and to Fibershed for this SO MANY ways—all of which improve our food our local community as well.

- Johanna Greenberg & Lennie Moore OF LIBERTY MEADOWS





Affiliate Voices

The Fibershed Affiliate Program supports an international grassroots network that promotes the development of regional fiber systems communities, including economic and non-economic growth, in the form of building relationships and new global networks. We provide a directory for connecting to independent Fibershed Affiliates around the world. Fibershed serves our members by facilitating connections and educational opportunities to cross-pollinate this work from the ground up.



Hues of Change: How Fibershed Affiliates Are Building Local Knowledge of Natural Pigments

Our textiles have the ability to tell a story about the origins of their material components and the hands that harvested, milled, or otherwise crafted them. When adding color to a fiber, designers and artisans may choose to use synthetic or natural dyes. Natural dyes provide rich evidence of a garment's story while offering biodegradable non-toxic alternatives to petroleum-derived and often harmful synthetic dyes. As one Fibershed affiliate says, "Each region has its own identity, which can be seen in the expression of pigment on our textiles." When we regionalize how our clothing is made, we are enriched by a deeper and more meaningful story of color — one tied to the land from which our clothes are borrowed.

Fibershed affiliates are at the forefront of discovering new (or rediscovering old) ways of natural dyeing that work in harmony with nature. In the Chesapeake watershed, Chesapeake Fibershed is capturing bioregion-specific knowledge and research on plant cultivation, history, and usage from local experts. The Nederland Fibershed is developing scaleable techniques that can be made available to the Dutch textile industry while nurturing and safeguarding biodiversity and healthy soil. Fibershed Affiliate Southeastern New England is studying the impacts of wastewater fertilizers on soils (the initial data looks promising!) for growing natural dye plants, and developing the necessary infrastructure to expand the model. Together, these affiliates seek solutions that increase environmental resilience, counteract the harmful effects of synthetic dyes, and contribute to a growing movement of place-based textile cultures.

Continue reading to learn more about three Fibershed affiliates advancing natural dyes and strengthening the fibershed network. We asked them questions about their work and what it means to their communities. These are their responses in their own words.

Chesapeake Fibershed: Plant and Mineral Source Book for Vibrant and Sustainable Textile Dyes

Covers 120 mile radius from Washington, DC

"Each region has its own identity, which can be seen in the expression of pigment on our textiles."

Tell us about your project:

Chesapeake Fibershed's natural dye project focuses on color from locally cultivated, native, and historically utilized dye plants. We envision this as an ongoing project which will include work with mineral pigments from our region and widening the knowledge of plant dyes each year.





We are working with models of sustainability to develop relationships with the growth and exploration of colorants on natural fiber. All of our findings will be captured in a book that will also be available online. Our research will include essays on plant cultivation, history, medicinal usage, and interviews with local dyers, gardeners, and educators.

What do you hope to accomplish with your book?

We hope our source book will prompt meaningful community conversations and share our research more broadly. We hope it will foster new innovations and lead us toward establishing the infrastructure necessary to produce and support a robust natural dye community.

What's the most important lesson you've learned from your project?

At this moment, we see many people exploring natural and local dyes from our bioregion. It seems essential to bring our voices together to share our knowledge and inspiration by initiating a dyer's circle that will develop further conversations.

We are not trying to write another dye book but rather to open the dialog with how a dyer might work with the plants in their own space. There are many resources readily available. We want people to be looking in their own backyard or neighborhood space, just as Rebecca did when researching her book Harvesting Color. Each region has its own identity, which can be seen in the expression of pigment on our textiles.

Continue following Chesapeake Fibershed's work at their website, chesapeakefibershed.com, and learn more about the source book initiative on their project page, A Natural Dyer's Journal in the Kitchen. You can also follow their work on social media: @chesapeakefibershed on Instagram and Facebook.

Fibershed Nederland: Herb-to-Color, Biodiversity and Natural Dyes Project

Covers The Netherlands

"I believe in the magic of our nature and its resources. Over time much of the knowledge about natural dyes and their use has been lost. During this project, we focus on our local raw materials to develop local natural pigments. I use the knowledge and recipes I received from my Syrian grandmother and apply this in a new innovative way."

— Roua ALHalabi, Lead Color Researcher





Tell us about your project:

Fibershed Nederland is advancing a project called 'Kruid-tot-Kleur' (herb-to-color), which focuses on developing scalable techniques for growing, harvesting, processing and preserving natural dyes and pigments. The demand for natural biodegradable materials is increasing, and with it, the need for natural dyes. But in the Netherlands, those who really want to use natural dyes must produce them on a small scale or purchase natural dyes from abroad.

We know from history that plants, trees, roots, bark and other biodegradable organic materials can be used as natural dyes, but (textile) artists and fashion designers in the Netherlands hardly have access to them. No natural dyes are produced locally, and there is very little knowledge about their application among artists, designers, and other stakeholders in the creative industry.

Through the 'Kruid-tot-Kleur' project, these techniques are being made available to the creative industry in the Netherlands, and provided with the correct recipes for the sustainable and colourfast dyeing of yarns, textiles and clothing.

Our project is being developed around native crops that contribute to biodiversity and soil enrichment, specifically in areas that suffered from monoculture in the past.

What do you hope to accomplish with your project?

Developing local natural dyes, making them suitable and available for scale application within the Dutch creative sector, clothing & textile industry, while stimulating and safeguarding biodiversity and healthy soil.

What's the most important lesson you've learned from your project?

This project is such an inspiration for all involved! Despite the fact that all participating partners have never worked together before, and are each coming from different sectors and professional backgrounds, the collaboration on this project seems so natural.

Kruid-tot Kleur involves local farmers, a processing partner from the food industry, a sheltered workshop with experience in drying and preserving food, a textile artist and researcher, and a fashion designer with a manufacturing facility that is associated with the healthcare sector

This project has brought us all new connections that form the foundation for new, exciting partnerships laying the foundation for our local value network. That in itself is a great result, but the most inspiring thing about this project is aligning with our diverse stakeholders on a common goal and shared values.

Continue following Nederland Fibershed's work at their website, fibershed.nl, and learn more about the Herb-to-Color project here. You can also follow their work on social media: @fibershed.nl on Instagram and Facebook.

Southeastern New England Fibershed: Scaling Natural Dye Farming Systems Using Wastewater

Covers Massachusetts and Rhode Island

"How will thoughtful and beautiful design change people's minds about this wastewater fertilizer? I can't wait to see the change over the course of this year."







Tell us about your project:

Southeastern New England Fibershed is experimenting with wastewater's impact on natural dye plants' growth and color. Last year, we worked with the nation's leading innovative/alternative septic test center in the U.S. (MASSTC) to develop a test site. On this test site, we grew natural dye plants in various conditions all spring and summer. These conditions included wastewater hydroponics, plots that wicked or were dosed on a timer with wastewater (blackwater), an indigo bed only fed urine, and a waste wool gardening project that grew plants so well even when it didn't receive water during a drought.

We were in awe of how massive the blooms were and how prolifically they grew all summer. Last summer was a fun test run for what we are doing now, which will be a lot more data-driven. For year two, our team will look a lot closer at data surrounding nutrients in the soil. While last year was all about seeing if wastewater would impact color and/or growth (it did!), this year is a lot more focused on urine fertilization of plants and the ability to scale it as a fertilizer. We'll be looking at urine's impacts on both the plants as well as the soil and effluent that comes out through the soil. We'll also be using a pasteurizer for the urine, and our hope is that MASSTC also can become a "urine depot."

Our dream would be to get more students involved and to think outside the box about how we can make this a reality. How will thoughtful and beautiful design change people's minds about this wastewater fertilizer? We can't wait to see the change over the course of this year.

What do you hope to accomplish with your project?

For the second year of this research, we are working with a small team to create fertilizer from wastewater, specifically urine. The program will help us develop the infrastructure and services necessary to collect, transport, process, and apply urine-derived fertilizers and humanure-based soil amendments. It's incredibly interesting to work with scientists and soil experts to look at the impact of wastewater on soil as well as watch how incredible it is as a fertilizer.

We have watched the project grow into something that could have lasting (positive) future impacts on natural dye (and all agricultural) farmers worldwide.

What's the most important lesson you've learned from your project?

Education! Any talk about the bathroom repulses people, but we have major wastewater problems worldwide because of poop and pee. There, we said it.

One of the major efforts we aim to achieve with all of this is to get people to consider that waste isn't waste. When processed correctly, urine and humanure are incredible fertilizers. We can turn this "waste" into an opportunity that could result in huge savings for farmers, less intensive mining of minerals, and less runoff from round-up ready fertilizers into ponds, streams, and oceans.

When we brought people to the test site last summer, they could not believe how large and aggressively the plants had grown. They are shocked when they find out it's thanks to pee and poop. All of this is heavily controlled at this test site, so the big push is how we can make it safe and scale it legally. That will require not only the public's support but the local government's as well.

Continue following Southeastern New England Fibershed's work at their website, senefibershed.org, and learn more about wastewater's impacts on natural dye plants on their blog. You can also follow their work on social media: @senewenglandfibershed on Instagram and Facebook.

These projects inspire and energize us, reflecting local communities' deep history, knowledge, and actions toward developing regional fiber systems. Together this work demonstrates how grassroots actions can galvanize into system-changing movements. These projects are just a glimpse of the incredible work happening on the ground across the Fibershed Affiliate Program. Learn more about the Fibershed Affiliate network through our Threading Resilience Zine, and get involved in your bioregion by visiting the Affiliate Directory.

Images courtesy of Chesapeake Fibershed, Fibershed Nederland, Southeastern New England Fibershed, and Hope Millham Photography.

Fibershed Staff



REBECCA BURGESS
Executive Director



 $\begin{array}{c} {\rm MIKE\,CONOVER} \\ {\rm Climate\,Beneficial^{\scriptscriptstyle TM}} \\ {\rm Technician} \end{array}$



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Membership & Learning
Center Coordinator



SARAH KEISER
Intersectional Land
Stewardship & Community
Grazing Initiatives Coordinator



LYNETTE NIEBRUGGE Carbon Farm Planning Lead



HEATHER PODOLL Partnership & Advocacy Coordinator

Fibershed wishes to thank the talented team of consultants and project leaders who contributed to this newsletter, all of whom conduct specialized services for the organization.

 $Photos\,by\,Paige\,Green;\,except\,Sarah\,Keiser\,by\,Noelle\,Gaberman$