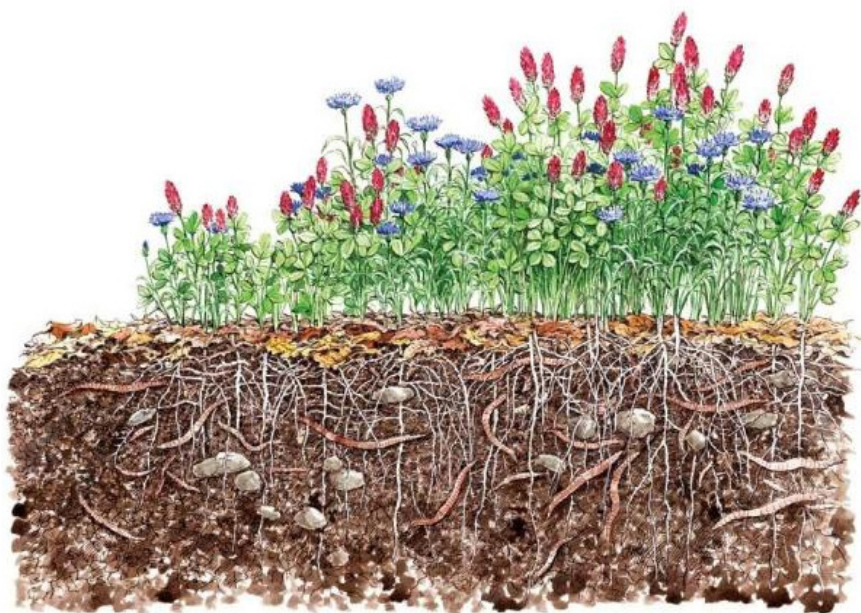


35th Annual Organic

Soil Amendment Sale

sponsored by Ten Rivers Food Web



Order Online Jan. 1-Feb. 4, 2021

tenriversmarketplace.com

*Pickup March 6, 2020, 9am-1pm
at Benton County Fairgrounds*

MANY THANKS TO:

Sale coordinator	Mark Luterra
Committee members	Jeremy Conyac Jeffrey Gray
Lead volunteers	Diane Arney James Cassidy Nate Johnson Kirsten Miller Yadira Ruiz Bina Schulte Madeline Tomka
Volunteer loaders	OSU Soil Science students OSU Organic Growers Club

A BIT OF HISTORY

The Soil Amendment Sale was started in 1987 by George and Dee McAdams, members of the Organic Gardening Club (now Growing Organic, a chapter of Ten Rivers Food Web). In early years, volunteers broke open bags of soil amendments and fertilizer and filled gardeners' containers at the south First Alternative Co-op in Corvallis, often over four consecutive weekends in March. Carol Cina coordinated the sale for 18 years. Originally under the umbrella of Oregon Tilth, the sale transitioned to Ten Rivers Food Web in 2014.

With growing popularity and changing regulations, the sale transitioned over time to pre-order and full-bag only, and beginning in 2014, thanks to Linda Sebring and later Nate Johnson, the pre-order process moved online. The sale outgrew the co-op parking lot, and the pickup location has moved several times over the last years. The fairgrounds location, new in 2020, is a big step up from our windblown tents and should allow the sale to continue to grow in the years ahead.

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How It Works

We combine orders from over 150 mid-valley and coastal organic farmers and gardeners into one order, which qualifies us for special volume pricing. We add only enough to cover our expenses (shipping, online store, forklift and venue rental) and to keep the lights on.

The day before pickup, around 40 tons of products arrive from Concentrates in two semi trucks. We arrange and inventory it all, then marshal a small army of volunteers to load everything into customers' vehicles in four hours on a Saturday morning in March. If you would like to be a part of this effort, please contact soilamendmentsale@gmail.com.



About Concentrates

Concentrates Northwest started in 1938 as a buyers' cooperative for local farmers, farm supply stores, and feed mills. They have since grown to become the largest wholesale distributor of organic fertilizers on the west coast. Manager Heather Havens, an OSU alum, joined the company in 1997, and retired owner Bill Sparks' adult children are also with the company, as CFO Kayla Hale and Warehouse Manager Brian Sparks.

Concentrates has a showroom and retail outlet at their Milwaukie warehouse location. If you run out of something and can't wait for the next Soil Amendment Sale, most of our offerings can be found there. They also offer a selection of tools, drip irrigation supplies, and low-tunnel construction kits. Visit their website at concentratesnw.com.

What Do I Need?

Organic fertility is about more than N, P, and K - though those are important. Organic matter, trace minerals, soil pH, mycorrhizal networks, soil microbes, and beneficial insects all play important roles.

A soil test is a good place to start. OSU Extension maintains a list of soil testing labs at:

catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em8677.pdf

Concentrates offers soil testing through [A&L Western Labs](http://www.aandw.com), and MicroTerra Labs in Albany (www.microterralabs.com) is a new addition to the list.

The OSU Extension Master Gardeners offer a wide range of workshops, publications, and in-person consultations targeted toward home-scale food production. Visit them at: extension.oregonstate.edu/mg/linn-benton

The OSU Extension Small Farms program provides similar services for small-scale commercial growers: extension.oregonstate.edu/smallfarms

Growing Organics, a chapter of Ten Rivers Food Web, hosts monthly potluck gatherings - hopefully resuming at some point in 2021 - where organic growers with many generations of experience share knowledge and ideas:

<http://www.tenriversfoodweb.org/growing-organics.html>

REGIONAL GUIDEBOOKS

A number of regional guidebooks provide general guidance for amending soils in our area to maximize vegetable production. These include:

Growing Vegetables West of the Cascades: The Complete Guide to Organic Gardening • *by Steve Solomon*

The Timber Press Guide to Vegetable Gardening in the Pacific Northwest • *by Lorene Forkner*

Backyard Bounty: The Complete Guide to Year-Round Organic Gardening in the Pacific Northwest • *by Linda Gilkeson*

Maritime Northwest Garden Guide • *by Lisa Taylor*

Soil Amendments

MINED MINERALS

LIMING AGENTS (to raise soil pH)

Lime

Essential to correct low soil pH which is ubiquitous in unamended soils in our region. Lime is calcium carbonate and also serves as a soil calcium supplement. Available as easy-to-handle pearls in 25 lb and 50 lb bags, or in economical 50 lb bags of powder.

Oyster Shell Flour

Perhaps better described as an animal-derived amendment, but functionally it belongs here. Oyster shells are ~95% calcium carbonate (lime) and finely powdered shells can be used similarly to lime to add calcium and raise pH. The remaining ~5% is phosphorus, sulfur, and trace minerals which will also feed the soil. Powder in 50 lb bags.

Dolomite

Calcium magnesium carbonate, roughly 22% calcium and 13% magnesium by weight. Can be used in place of lime to raise soil pH if soil is deficient in magnesium. Available as pearls or powder in 50 lb bags.

Wollastonite

New for 2020. Calcium silicate. A relative newcomer to organic agriculture, wollastonite provides calcium and raises pH similar to lime, but it does not return carbon to the atmosphere and may actually encourage carbon sequestration in the soil. It also provides soluble silica, which can strengthen cell walls and has been reported to help cucurbits resist powdery mildew. Applied to the soil surface, the needle-like crystals may deter soft-bodied pests in a manner similar to diatomaceous earth. Available in powder form in 50 lb bags.

MACRONUTRIENTS (P, K, Ca, Mg, S)

Soft Rock Phosphate (0-7-0)

Primarily calcium phosphate with other trace minerals. Actual phosphorus content is closer to 20% but solubility is low. Additional calcium and phosphorus will be released over time. Use only if recommended by a soil test; phosphorus tends to be naturally high in organic systems. Powder in 50 lb bags.

K-Mag (0-0-22)

Potassium magnesium sulfate: 22% potassium, 11% magnesium, 22% sulfur. Potassium is naturally abundant in most Willamette Valley soils; use only if a soil test indicates that potassium supplementation is necessary. Granules in 50 lb bags.

Gypsum

Calcium sulfate. Valuable source of calcium and sulfur, two minerals which tend to be naturally deficient in our soils. Does not change soil pH; use instead of lime if pH correction is not required. Heavy applications of gypsum can help to improve the tilth of clay soils. Available as pearls in 25 lb and 50 lb bags, and as a powder in 50 lb bags.

Epsom Salt

New for 2020. Magnesium sulfate. Soluble source of magnesium and sulfur; may be applied through irrigation. More easily dissolved than gypsum. Does not alter soil pH. Crystals in 50 lb bags.

Sulfur Granules 90%

Nearly pure elemental sulfur. Can be used as a sulfur supplement, but will lower pH, so gypsum is usually a better option. Sulfur granules are best used around acid-loving crops like blueberries. Granules in 50 lb bags.

TRACE MINERALS

Azomite

Mined from an ancient deposit in Utah; contains over 70 different minerals and trace elements. Micronized powder in 44 lb bags.

Super Greensand

Mined in Brazil. Primarily glauconite, a green-colored complex mineral containing iron, magnesium, potassium, silica, and up to 60 other elements in trace amounts. Helps to loosen heavy clay soils. Sandy powder in 44 lb bags.

Glacial Rock Flour (McKenzie)

Formed by the slow grinding action of glaciers on basalt and andesite rocks in the Oregon Cascades. Slow-release source of iron, magnesium, manganese, and other trace minerals. Available in convenient 6 lb tubs for adding to compost or for small plots.

Glacial Rock Dust (Gaia Green)

Derived from a wide variety of rocks pulverized by glacial action and mined in British Columbia. Contains iron, magnesium, manganese, and other trace minerals. Fine sandy powder in 50 lb bags.

Basalt Rock Dust (Gaia Green)

Finely pulverized basalt rock mined in the mountains of British Columbia. Less weathered than glacial powders; higher in iron, magnesium, and manganese. Fine sandy powder in 50 lb bags.

Bioamin Boron

Boron is an essential plant nutrient that can be deficient in Willamette Valley soils, but it is also toxic at high levels and easy to over-apply. Bioamin boron is an amino-acid complexed bioavailable boron supplement in liquid form. Use with care if repeated soil tests or leaf samples indicate boron deficiency and if boron supplied by compost and other amendments is insufficient. Contains 3% boron. Apply no more than 1 gallon per acre (6 tablespoons per 1000 square feet); dilute well and apply evenly. 1 gallon jugs.

PLANT-DERIVED AMENDMENTS

Alfalfa Meal (2.8-0.3-2.4)

Economical, produced from ground alfalfa hay. High in potassium. 40 lb bags.

Linseed (Flax) Meal (6-1-1)

Good plant-based source of slow-release nitrogen. 50 lb bags.

Soybean Meal (8-0-1)

Highest nitrogen content available from a plant source. 50 lb bags.

North Atlantic Kelp Meal (1-0-3)

Good source of readily-available trace minerals. Steve Solomon calls it a "luxury soil amendment." 50 lb bags.

ANIMAL-DERIVED AMENDMENTS

Blood Meal (13-0-0)

Dried, powdered blood; by-product of meat industry. Source of readily-available nitrogen and iron. 40 lb bags.

Bone Meal (3-15-0)

Powdered animal bone; by-product of meat industry. Concentrated source of available phosphorus and calcium. 50 lb bags.

Crustacean Meal (4-1-0)

Ground crab and shrimp shells. High in chitin, which can stimulate soil microbes that also attack chitinous insect pests. 40 lb bags.

Feather Meal (12-0-0)

Very popular organic nitrogen source, often used on farms and a component of many fertilizer blends. Made from ground poultry feathers. One of the most economical organic nitrogen inputs, in terms of cost per pound of available N. 50 lb bags.

Fish Bone Meal (6-18-0)

Another very popular soil amendment and component of fertilizer blends. Good source of available phosphorus, and higher nitrogen content than bone meal. 50 lb bags.

Fish Meal (10-4-0)

Dried, ground fish; by-product of seafood processing. Source of nitrogen, phosphorus, and trace minerals. 50 lb bags.

COMPOST AND ORGANIC MATTER

Ocean Rich Fish Compost

New for 2021. Sourced from Lane Forest Products in Eugene. Nutrient-rich compost made in part from fish by-products, aged for one year. For optimum fertility benefit, apply smaller amounts more often vs. standard compost. 1.5- cubic-foot bags, approximately 55 lbs.

Black Gold Organic Compost

Basic, economical organic compost; source materials and locations may vary. One-cubic-foot bags, approximately 40 lbs.

4 Corners Worm Castings

Sourced from Castle Rock, WA. Labeled “organic” but not OMRI listed; certified producers should verify acceptability before use. One-cubic-foot bags, approximately 40 lbs.

Farmer Brown's Worm Castings

Sourced from an organic earthworm farm in Sandy, OR. OMRI listed. Available in 15 lb and 30 lb bags.

Live Earth Humates

Stable humic and fulvic acids mined from ancient soil layers in Utah. Essentially compost that has been aged for around 70 million years. Excellent soil conditioner. 50 lb bags.

Ful-Humix

Blend of soluble fulvic and humic acids derived from treatment of mined humate deposits. Increases nutrient uptake and stimulates beneficial microorganisms. Available in 300 g and 1 kg packages. Larger sizes up to 50 lb available by request.

Black Owl Biochar

Created by partial combustion of woody materials with limited oxygen, biochar is pure "activated" carbon that improves nutrient retention and uptake, water retention, soil tilth, and microbial activity. One-cubic-foot bags.

MICROBIAL AMENDMENTS

Southern Oregon Bokashi

Blend of lactic acid bacteria, photosynthetic bacteria, and yeasts grown into a grain-based substrate and dried. Aids in mineralization of nutrients in the soil and breakdown of organic matter. Not OMRI listed; certified producers should verify acceptability before use. Available in 3 lb and 5 gallon sizes.

Bu's Brew Biodynamic Compost Tea

Each 1 lb tea bag produces up to five gallons of nutrient-rich, microbe-filled compost tea. Demeter-certified Biodynamic. Not OMRI listed; organic-certified producers should verify acceptability before use. Package contains four 1-lb tea bags.

EM-1 Microbial Inoculant

Liquid microbial blend that aids in soil aggregate formation and maintenance of healthy soil microbial communities. OMRI listed. Available in pints and gallons.

MycoApply Ultrafine Endo/Ectomycorrhizal

OMRI listed. Blend of eleven species of endo- and ectomycorrhizal fungi that interface with plant roots to improve nutrient uptake. Suspendable powder for liquid application. 1 lb package.

Fertilizer Blends

Nutri-Rich (4-3-2)

Economical organic fertilizer derived primarily from composted chicken manure, produced in Canby, OR. Based on local experience and Steve Solomon's writings, this product releases nitrogen quite slowly, and heavy applications may be necessary to obtain desired results. Available as large pellets (20 lb and 50 lb sizes) or smaller granules (40 lb size).

Concentrates' Blend (5-5-3) with Trace Minerals and Mycorrhizae

Derived from fish bone meal, feather meal, flax seed meal, kelp meal, green-sand, and glacial rock dust, along with 11 species of mycorrhizal fungi. Available in 25 lb and 50 lb bags.

Liquid and Soluble Fertilizers

Fish Emulsion (2-1-0.3) - "Oceanic Hydrolysate with Crab and Shrimp"

Rapidly available nitrogen, phosphorus, and calcium. Screened to 150 mesh; may be applied through drip irrigation. 1 gal and 2.5 gal sizes.

Kelp Liquid

Readily available trace nutrients, and boost for soil microorganisms. 1 gal and 5 gal sizes.

Soluble Kelp Extract (0.5-0-17)

Trace nutrients from over 200 lbs of kelp concentrated into each pound of dried extract. Soluble, may be applied through irrigation. 1 lb and 4 lb sizes.

Cover Crops

Grow your own organic matter in place while preventing erosion and fixing nitrogen. All of our 2021 offerings are certified organic.

COOL-SEASON

Organic Rich Mix (LOCAL)

Balanced winter blend of 35% Cayuse oats, 50% Frost Master peas, 10% purple vetch, and 5% crimson clover by weight. Combines weed-smothering, organic-matter-building, and nitrogen-fixing attributes. From Buzz Cover Crop Seeds in Philomath. 20 lb bags.

Oats

Good winter cover, somewhat easier to kill in spring than rye. 50 lb bags.

Cereal Rye

Very hardy, weed-smothering, good cold-soil germination. 50 lb bags.

Rye/Vetch Blend

50/50 blend of hardy, weed-smothering cereal rye and nitrogen-fixing vetch. 50 lb bags.

Triticale/Pea Blend

50/50 blend of fast-growing, weed-smothering triticale grain and nitrogen-fixing field peas. 50 lb bags.

Field Peas

Winter/spring nitrogen fixer; best blended with a cereal for full ground coverage. 50 lb bags.

Fava Beans

Excellent nitrogen fixation and winter hardiness. 50 lb bags.

WARM-SEASON

Buckwheat

Frost-tender warm-season cover crop. Very rapid growth and soil coverage. Bees love it. 50 lb bags.

Sorghum x Sudan

Extremely vigorous annual grass, grows to 6' tall. Killed by frost and can be left as a natural mulch over winter. 50 lb bags

Propagation

Several pre-mixed options available, or create your own mix from organic components.

PRE-MIXED

Black Gold Organic Seedling Mix

Fine-textured blend of peat and perlite with no added fertility for germinating seeds with minimal disease issues. 1.5-cubic-foot bags.

Black Gold Natural and Organic Potting Soil

Blend of peat moss, perlite, compost, worm castings, and composted bark with fertilizer added. 2-cubic-foot bags.

Black Gold Waterhold Coco Blend Potting Soil

Blend of peat moss, coconut coir, worm castings, and perlite with no fertilizer added. 2-cubic-foot bags.

4 Corners MJR Blend Potting Soil

New for 2021. Blend of peat moss, pumice, and worm castings from the makers of 4 Corners worm castings in Castle Rock, WA. 1-cubic-foot bags.

INGREDIENTS

COMPOST AND WORM CASTINGS: See pp. 9-10

COIR AND PEAT

Coconut Coir

A top-selling product every year. Coir is fiber from coconut husks, a byproduct of coconut farming. Coir holds water very well and is much closer to neutral pH than peat. Coir can sometimes tie up calcium and magnesium, which can be corrected by supplementing these minerals in your mix. Compressed 10 lb bricks expand to two cubic feet each.

Sphagnum Peat Moss

Available in 3.8-cubic-foot compressed bales that weigh 90-100 lbs.

WATER-HOLDING MINERALS

Perlite

A volcanic glass mineral that is “popped” with high heat to create very light, porous, white particles that absorb water and aerate soil. Compared to vermiculite, perlite costs less than half as much and is more effective at aeration, but loses water more rapidly. Available in fine (for germination mix) and medium (for potting soil) sizes. Four-cubic-foot bags are much lighter than one would expect.

Vermiculite

A layered, mica-like mineral that expands when heated. The gold standard for water retention in propagation mixes. Available in fine (for germination mix) and medium/coarse (for potting soil) sizes. Four-cubic-foot bags.

Pumice

A porous volcanic mineral. Much heavier than perlite and vermiculite and less prone to floating to the top of pots and containers. Longer lasting in garden soil. One-cubic-foot bags of medium size, ~1/4” particles.

Organic Pest Controls

All of these products are listed for use in organic production, but some have restrictions. Certified growers should check with their certifier before use.

FUNGAL DISEASE CONTROL

Actinovate Biological Fungicide

Contains a bacterium, *Streptomyces lydicus*, that is effective against a wide range of soil-borne and foliar fungal pathogens. Must be used within six months of purchase. 18 oz. package

SLUG AND CATERPILLAR CONTROL

Diatomaceous Earth

Fractured shells of ancient microscopic diatoms have very sharp edges, puncturing the bodies of slugs and caterpillars that crawl across them. No chemicals involved. Less effective when wet, so better in greenhouses and tunnels. Powder in 50 lb bags.

Sluggo

Non-toxic iron phosphate bait pellets are toxic to slugs and snails but safe around children and pets. Slug control is essential for winter gardening in Oregon. Available in 2.5 lb, 10 lb, and 50 lb packages.

Sluggo Plus

Sluggo with the addition of spinosad, a natural insecticide derived from a soil-dwelling bacterium. Effective against cutworms, earwigs, and pillbugs in addition to slugs and snails. Available in 2.5 lb and 10 lb packages.

INSECT CONTROL

Pyganic 1.4%

Natural insecticide extracted from chrysanthemum flowers is effective against most insect pests including aphids, lygus bugs, beetles, and caterpillars. Kills most beneficial insects too, so use selectively and as a last resort. Available in 8 oz and 32 oz sizes. 8 oz covers up to a quarter of an acre.

Surround WP

Very fine kaolin clay coats fruits and foliage, discouraging insects from feeding and laying eggs. Rain will wash it off, so most effective in the dry season to prevent pests from attacking developing fruits. Fine powder in 25 lb bags.

WEED CONTROL

20% Herbicidal Vinegar

Concentrated vinegar kills leaves on contact. Useful for sidewalk cracks, under greenhouse tables, and other places where mechanical weeding is difficult. Not economical to cover large areas. Will burn back foliage of perennial weeds, but most will regrow from roots. Caustic to skin and eyes; use with care. 1 gallon jugs.

Animal Supplies

Concentrates carries a wide range of organic poultry and livestock feeds and supplies. We are continuing to offer a small selection that was added to the sale in prior years, primarily of interest to gardeners with backyard poultry. We do not intend to expand our offerings in this area, but if you would like a large quantity of a product not on this list, consider a special order (p. 17).

Oyster Shell, Lay Blend

Flaked oyster shell, poultry calcium supplement to promote strong egg shells. 50 lb bags.

Poultry Grit

Screened rock grit to aid in poultry digestion. Available in four sizes for chicks, pullets, adult chickens, and turkeys. 50 lb bags.

Pine Shavings

Useful for poultry bedding, and also overwintering stored roots etc. Compressed bags expand to 10 cubic feet.

Noah's Choice Animal Bedding Pellets

Pelleted pine bedding for horses or other livestock. 40 lb bags.

Diatomaceous Earth, Perma-Guard

Feed-grade diatomaceous earth. 5 lb and 50 lb bags.

Empty Pallets

We will have approximately 40 pallets at the end of sale day. Last year we spent an inordinate amount of time dealing with empty pallets. This year if you would like any, you may add them to your online order. They are free, but as we do not know how many we will have, requesting pallets does not guarantee availability. If you order pallets, please plan to arrive between 12:30-1 pm on sale day. You may make multiple trips, but all pallets must be picked up by 2 pm.

Special Orders/Large Orders

If you would like a large quantity of a product from Concentrates that is not listed here, you may place a special order. Special orders must exceed \$500. The Concentrates product list may be viewed at:

concentratesnw.com/wp-content/uploads/2020/10/Showroom-Price-list-20201014.pdf

Send an email to soilamendmentsale@gmail.com requesting a price quote.

Orders over \$500 will receive an automatic 5% discount. We encourage payment by check for large orders to avoid the 3% card processing fee and keep dollars local.

Paying by Check

Paying by check eliminates card processing fees, which are the single largest expense associated with the sale. If you are able to pay by check, please complete your order online and select the check payment option.

If you are unable to access the online marketplace, you may write up a manual order form and return it with your payment. Please make checks payable to Ten Rivers Food Web. Mail checks and manual orders to:

Soil Amendment Sale
c/o Ten Rivers Food Web
PO Box 2680
Corvallis, OR 97339

All checks must be received by February 11, 2021. If payment is not received by this time and we are unable to contact you, your order will be automatically cancelled.

Pickup Details

Items can be picked up from the Solar Building at the Benton County Fairgrounds (SW 53rd St. and SW Reservoir Ave. in Corvallis). See map on next page. Note that traffic flow is reversed from 2020.

Full-pallet orders (generally over 1000 lbs or 50 items) and special orders will be scheduled for an appointed time on Friday, March 5, 2021. We will have a forklift available Friday only and can load pallets onto trailers/flatbeds or into full size pickups/box trucks.

All other orders must be picked up between 9 am and 1 pm on Saturday, March 6, when we will have volunteers to help load vehicles. Please do your best to arrive at your assigned pickup time, although if something comes up or you miss it we will not turn anyone away for arriving at the wrong time.

Please enter from Reservoir Rd and follow the signs to the west end of the big red barn covered in solar panels. The welcome table will have a copy of your order sheet, and volunteers will direct you through the four loading stations.

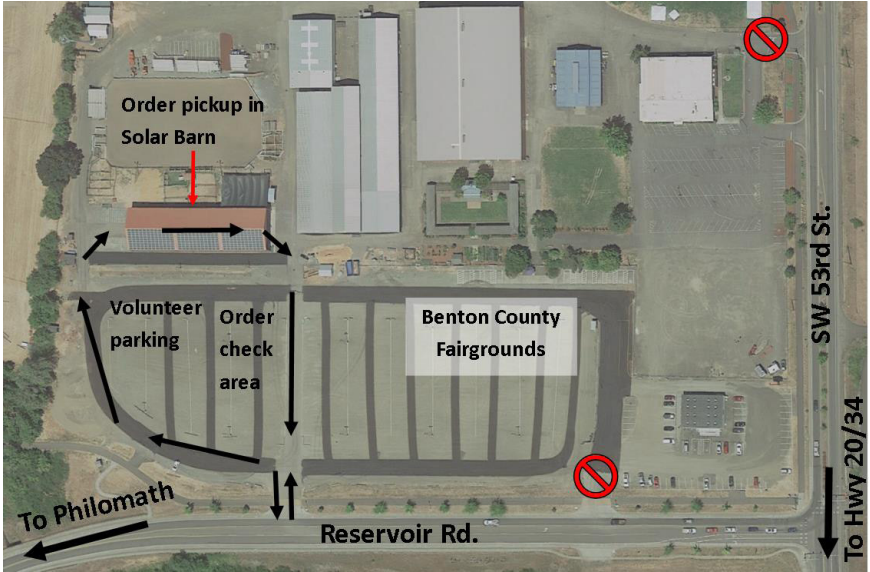
For no-contact pickup, please tape your last name and order number to a driver-side window and open your trunk, hatchback, or tailgate prior to entering the building.

Please wear a mask when your vehicle doors or windows are open, or if you need to leave your vehicle inside the building. To minimize fumes inside the building, please turn off your engine when not in motion.

We DO NOT have the ability to store quantities of items that are not picked up. The success of this event depends on everyone remembering to pick up their items. If for any reason you cannot make it on Saturday, please send someone in your stead. In case of last-minute emergencies please call Mark at 541-714-0492.

We do our best to load all items accurately, but a few errors inevitably occur. We encourage you to stop in the parking lot prior to exiting the site to check your items against your order sheet. If you discover any errors, please call Mark (541-714-0492) ASAP. We will do our best to correct all loading errors, but **we cannot promise to correct errors discovered more than 24 hours after the sale.**

Sale Map



Saturday, March 6, 2021

9 am - 1 pm

See you there!

This event brought to you by



An all-volunteer, 501c3 nonprofit organization dedicated to supporting local food production and distribution across Benton, Linn, and Lincoln counties.

Visit us online at:

www.tenriversfoodweb.org

Check back in October for



Fill Your Pantry

A local food marketplace featuring beans, grains, squash, potatoes, onions, garlic, apples, frozen meats, honey, and much more to keep you well-supplied until the next growing season.