



LAKEVIEW ORGANIC GRAIN

Box 361, 1330 Nutt Rd

Penn Yan, NY 14527 315-531-1038

www.lakevieworganicgrain.com

mh@lakevieworganicgrain.com

FALL 2026 NEWSLETTER

WHAT ARE MY CHOICES? . . . Yes, indeed, that is THE question on everyone's mind right now.

For the vegetable farmer wanting to add fertility and protect their soil over the winter. For the grain farmer managing pesky weeds and uncertain markets. For the dairy farmer in need of more forage this fall and planning ahead for next spring. For all of us who did not get spring crops planted on time due to incessant rain. For the farm family (like ours) navigating generational transition with harmony, equanimity, wisdom and good humor . . . and for all of us, trying to live in this complicated and changing world with kindness, flexibility, cooperation and gratitude.

On our farm, we've come to the conclusion that adding more of the right diversity will control most of the agronomic and marketing challenges we deal with. Cultural practices make ALL the difference. Cover-crops are good sense – a good mix adds diversity in species and timing, they cut fertilizer costs, improve soil health and condition, prevent soil erosion, improve water-holding and infiltration capacity, produce nitrogen, control weeds and so much more.

Cover crops also are great animal feed - grazed, chopped, and ensiled! A good mixture of species diversity is key to successful cover-cropping and annual forage production, but sometimes all the choices can seem mighty confusing.

This does not have to be complicated – and this newsletter will try to break that down logically!

Your fall crop plans will depend on four factors – (1) what you are trying to accomplish, (2) when you can plant, (3) whether the covercrop/forage to grow in the spring or to winterkill at first hard frost and (4) what equipment/soil preparation you plan to use.

Like an artist painting a beautiful picture, you choose your 'colors' from the repertoire of crops which will best suit your needs, your situation, and your window of opportunity and then as we always say, "inch by inch, row by row, we're gonna make this cover-crop grow!"

But for right now, today, please look up from all the work and see the joy of cows and pigs on pasture, the long rows of corn tasseling and snapbeans tendrilling, the plump chickens in their movable pens, the smells of fresh hay and pungent silage, moist grain and summer morning air, the greenest greens, the golden grains, the rich dark earth, the bluest sky, the juiciest tomato, the shiniest eggplant, the eyes and tired backs of the family and friends who accompany us on this wonderful, challenging adventure.

Delight in the tangible touchable fragrant joy of harvest, the long mild summer evenings and the foggy cool mornings of early fall, sticky juice of a tree-ripe peach, the delight in our children's eyes, the delicious food on our tables, and the solid touchable physical truth of our hard work and time.

We order our fall cover crop seeds, we check our feed bins, we enjoy watching our plants and animals grow, because this half-full/half-empty glass of farm life with all its challenges, changes, and choices

YES, all of this!

. . . it is what we do, it is who we are . . .

CERTIFIED ORGANIC SEED - FALL 2026

Alfalfa – Blue River 3800 (high yield, fast recovery, disease resistant) <i>Organic!</i>	290.00/50lb
Alfalfa – Blue River 374HD (premium yield and quality, branch rooted) <i>Organic!</i>	360.00/50 lb
Oats – Esker (midseason, high yield & test weight, blue tag) <i>Organic!</i>	28.00 /50 lb
Oats – Hayden (midseason, high yield & test weight, blue tag) <i>Organic!</i>	28.00 /50 lb
Oats – Guyanoga – <i>our cover crop oat Organic!</i>	26.00 /50 lb
Barley - Equinox (winter, 6-row feed barley <i>Organic</i>	35.00 /50 lb
Wheat - Viking 211 hard red winter wheat <i>Organic!</i>	35.00 /50 lb
Triticale – Kashong winter triticale (grain or forage) <i>Organic!</i>	40.00 /50 lb
Triticale – FX 1022 winter triticale (best for forage,) <i>Organic!</i>	40.00 /50 lb
Spelt – winter <i>Organic!</i>	40.00 /50 lb
Rye – cover crop <i>Organic!</i>	30.00 /50 lb
Peas – ‘4010’ purple forage pea <i>Organic!</i>	45.00 /50 lb
Peas – Austrian winter pea - our own Canandaigua brand <i>Organic!</i>	50.00 /50 lb
Peas – DS Admiral yellow grain pea <i>Organic!</i>	45.00 /50 lb
Buckwheat <i>Organic!</i>	50.00 /50 lb
Hairy Vetch <i>Organic!</i>	140.00 /50 lb
Clover – Medium Red (best for cover crop) <i>Organic! Inoculated, but not coated</i>	215.00 /50 lb
Clover – ‘Manitoba’ (better for grazing, longer rotations) <i>Organic! Coated & inoculated</i>	250.00 /50 lb
Clover – Alsike- resilient cross between red and white clover <i>Organic!</i>	210.00 /50 lb
Clover - Crimson <i>Organic!</i>	165.00 /50 lb
Clover - Yellow sweet <i>Organic!</i>	175.00 /25 lb
Clover – Ladino white clover <i>Organic!</i>	335.00 /50 lb
Timothy – Climax <i>Organic!</i>	170.00 /50 lb
BMR Sorghum-Sudangrass ‘Blue River 236’ Gene 6/dry stem) <i>Organic!</i>	115.00 /50 lb
Organic Pasture/Hay Mix <i>Organic! (25 lb bags)</i>	120.00 /25 lb
<i>smooth brome grass, timothy, perennial & annual ryegrass, festilolium, meadow fescue</i>	
Orchardgrass – Echelon (late maturity, exc yield & hardiness) <i>Organic! (25 lb bag)</i>	115.00/25 lb
Tall Fescue – Kora (drought tolerant, deep rooted exc yield, digestability) <i>Organic!</i>	230.00 /50 lb
Meadow Fescue - Laura (high yield, quick establish, very palatable, tolerant of wet soils)	220.00 /50 lb
Perennial Ryegrass – Diwan <i>Organic! (quick establish, best on heavy soil, late maturing)</i>	175.00 /50 lb
Annual (Italian) Ryegrass - <i>Organic! (quick growth, great in new seedings, high yield)</i>	120.00 /50 lb
Festilolium – Federo <i>Organic! (Meadow fescue x Italian ryegrass, exc yield)</i>	175.00 /50 lb
Japanese Millet <i>Organic!</i>	70.00 /50 lb
Yellow Mustard <i>Organic!</i>	130.00/50 lb
Tillage Radish - Tapmaster- <i>Organic!</i>	150.00 /50 lb
CONVENTIONAL UNTREATED SEED	
Clover – Berseem <i>*conventional untreated only</i>	125.00 /50 lb
Clover – Shogun improved medium red <i>*conventional untreated only</i>	150.00 /50 lb
Clover – White Dutch (great for vegetable row middles) <i>*conventional untreated only</i>	250.00 /50 lb
Cow Pea – Iron & Clay <i>*conventional untreated only</i>	60.00/ 50 lb
Birdsfoot Trefoil <i>*conventional untreated only</i>	350.00 /50 lb
Brome grass - AC Royal - smooth conv unt (excellent persistence, best for heavier soil)	205.00 /50 lb
Turnip – Barkant Forage <i>*conventional untreated only (25 lb bag)</i>	65.00 /25 lb

Sunflower – Peredovik <i>*conventional untreated only</i>	48.00 /50 lb
Phacelia - <i>*conventional untreated only</i>	120.00/50 lb
Sunn Hemp - <i>*conventional untreated only</i>	95.00 /50 lb
Flax – brown <i>*conventional untreated only</i>	50.00 /50 lb
Lentil - Morton - <i>*conventional untreated only</i>	60.00/ 50 lb
Faba Bean – Felix small seeded - <i>*conventional untreated only</i>	50.00/ 50 lb
Chicory – Trigger - <i>*conventional untreated only</i>	300.00/50 lb

Please call us if you need more information!



RECOMMENDED SEEDING RATES

<i>Crop</i>	<i>planting date</i>	<i>Seeding Rate/A</i>	<i>Seeding Depth</i>
Winter Triticale	mid Sept - late Oct	100 - 150 lb/A	1 - 2"
Winter Wheat	mid Sept - early Oct	120 - 180 lb/A	1 - 2"
Winter Spelt	late Sept - mid Oct	100 -120 lb/A	1"
Winter Barley	early-mid Sept	96 - 130 lb/A (3-4 bu)	1-2"
Rye	mid Sept – early Nov	100 –150 lb/A	0.5 – 0.75"
Oats for Cover-crop	mid Aug - mid Sept	50-100 lb/A (2-3 bu)	1-2.5"
Buckwheat	until early Sept	40 - 60 lb/A	0.5 - 1.5"
Austrian winter peas	mid Sept - mid Oct	60-100 lb/A	1-3"
Forage peas	until early Sept	60-100 lb/A	1-2"
Hairy Vetch	mid Sept - mid Oct	8 - 10 lb/A	0.25 - 0.50"
Yellow Mustard	early spring, fall	7-10 lb/A	frost seed - 0.75"
Medium Red Clover	early spring, fall	8 - 15 lb/A	frost seed - 0.5"
Tillage-type Radish	Aug - mid Sept	6-8 lb/A alone	0.25 – 0.5"
		2-4 lb/A with other cover-crops	
Forage Turnip	Aug-early Sept	1.5–3 lb/A	1"
BMR Sorghum sudan	June - July	35-50 lb/A	0.5 - 1.0 "
Japanese Millet	June – July	25 – 30 lb/A	0.25 – 0.5"
Alfalfa	spring, fall	12 - 20 lb/A	0.25 - 0.5"
Timothy	spring, fall	2 - 8 lb/A	0.25 - 0.5"
Orchardgrass, Ryegrass	spring, fall	4 - 12 lb/A	1 - 1.5"
Bromegrass	spring, fall	4 - 12 lb/A	1 - 1.5"
Reeds Canarygrass	spring, fall	6 - 12 lb/A	0.5 - 1"
Birdsfoot Trefoil	spring, fall	4 - 10 lb/A	0.25 - 0.50"
White Clover	spring, fall	2 - 8 lb/A	0.25 - 0.50"
Winter Camelina	fall	6-8 lb/A	0.25 - 0.50"
Pasture/Hay grass mix	spring, fall	3-8 lb/A	0.25 - 0.50"

For best quality, seed grass mix with 1-2 bu/A oats as a nurse crop, and overseed with 12-15 lb/A alfalfa,
1-2 lb/A white clover or 6-8 lb/A medium red clover

**** Organically approved non-GMO Rhizobium inoculants are available (clover/alfalfa, pea/vetch and soybean)**

- All seed must be paid in full at time of delivery/pickup.

- Delivery costs are NOT included in seed price.

-

- Pallet deposit of \$10.00/pallet, refundable upon return of pallet in same condition

- All returned seed - 10% re-stocking fee. Only sealed bags in original condition will be accepted for return.

SHIPPING OPTIONS - we offer the following seed shipping options:

You pick it up – always the cheapest, but please always call 24 hours in advance so we can have your order ready for you!

** Our brand new shared office with Seneca Grain and Bean is at 1330 Nutt Rd., Penn Yan, NY. Our phone number is 315-531-1038. ** Please note that the feed mill has now been closed for 2 years, we are NOT there! **

Rist Transport– for pallet (LTL) delivery, rates vary with location, generally about \$200 for a pallet to a farm with a forklift for unloading. We can put up to 2500 lb on each pallet. Liftgate service adds about \$75 to the delivery of each pallet. Please call us for a quote.

UPS – delivery in 2 days, only usually cost effective for 4 bags or less. The UPS charge is usually about \$50/bag.



FALL SMALL GRAINS . . . What are my choices?

Barley must be planted early in the fall, usually in early September, approximately 1-2 weeks before usual wheat planting, to be sufficiently well-established before winter. Plant at 2-3 bu/A. Barley will be the first small grain in the summer to be harvested - generally in mid-late June. Barley is best adapted to rich, well-drained, loamy soils and should not be planted on poor, sandy, or wet fields. Barley may not be sufficiently winter hardy in colder areas of the Northeast.

Equinox winter barley is a six-row variety for feed, that has superior winter hardiness and matures early. Barley produces good quality silage or hay, producing high quality, highly digestible forage, low in acid detergent fiber and lignin.

Triticale is a great grain for the Northeast, a cross between rye and wheat. It is generally the highest yielding small grain and forage crop that can produce approximately 10-12 T/A of high quality forage, or up to 3T grain/A

This year, we are excited to add **both FX1001 and FX1002** forage winter triticale, very high yielding awless leafy plants that matures high quality forage earlier in the spring. Our **Kashong** variety can be used either for grain or for forage. For best quality forage, triticale should be harvested at the boot stage and may require more time for wilting than rye and wheat.

Triticale is seeded at 2 bu/A in late September through late October, although we have seen For outstanding forage, we strongly recommend dairy farmers plant winter triticale and Austrian winter peas for spring forage/grazing.

Wheat is a versatile small grain with several strong markets. Traditionally the soft white wheat varieties are most popular in New York. There is a growing market for both soft white and hard red wheat for the food/flour milling market. Best planted in late September/early October, wheat planted too early or too late may result in poorer winter survival. Depending on time of harvest, wheat is a good choice following soybeans.

Wheat is well adapted to most soils, performing best on loamy, well-drained soils with medium to high fertility. It will withstand wet soils better than barley or oats but not as well as rye and triticale. If there is rain during harvest, wheat may sprout, making it unsuitable for the food market.

Because there is not always a strong market for organic feed wheat and there is a weak market for soft red wheat, make sure you plan the destination & market before variety selection and planting.

Spelt - this ancient wheat has a persistent hull that must be removed (dehulled) before it can be used for the food/flour milling market. People with wheat intolerance often are able to eat spelt. Spelt grows taller and leafier than most wheat, making it more competitive against weeds. Spelt is also more tolerant to poorly drained soil or lower fertility conditions. Spelt is less likely than wheat to sprout if rain comes during harvest. Planting dates and rates for dehulled spelt are similar to wheat. Often called 'speltz' in Pennsylvania, whole spelt can be used in horse and cattle feed with approximately the same nutritional value as oats. Because spelt needs to be dehulled before sale for food use, make sure you plan the destination/market before planting.

Rye is a traditional winter cover crop. Rye is the most winter hardy of all small grains, tolerant of low fertility, acidic or sandy soil. Like wheat, rye can be sown in late August at 2-3 bu/A to provide fall grazing, excellent winter ground cover, and spring grazing. Maturing forage rye can become unpalatable when vigorously growing in the spring and may impart off-flavors to milk.

There is an emerging market for larger-grain hybrid

rye for distilling and baking. Hybrid rye produces larger kernels, higher yield, and better quality for the food/distilling market, but must be ordered ONLY on a custom basis by no later than 9/1/26 and requires signing a strict license prohibiting saving seed or selling as seed. Rye infected with the fungus ergot can cause abortions and other health issues in cows. Excessive nitrogen can cause lodging. As a cover crop, rye strongly suppresses weeds, but may leave a suppressive residual effect in the soil.



Cover Crops or Annual Forages???

The annual forages, so prized on some dairy farms to extend the season and add valuable nutritious tonnage at critical times are often the same plants that vegetable farmers use as cover crops to improve soil health, increase organic matter, suppress weeds, improve nutrient cycling, and protect soil from erosion!

By first identifying a repertoire of suitable plant species, we can then develop compatible mixtures and pinpoint our particular 'windows of opportunity' to address the unique goals and needs of our farm

I. Build the Repertoire

LEGUMES – 4010 forage peas, Austrian winter peas, hairy vetch, red clover, grazing white clover, Dutch white clover, yellow sweet clover, alsike clover, crimson clover, alfalfa, sunn hemp, sainfoin, lupin, faba beans, phacelia, cowpea, lentils, birdsfoot trefoil, lentil

GRASSES – oats, wheat, rye, barley, triticale, spelt, BMR sorghum sudangrass, Japanese millet, annual ryegrass, timothy, other sorghums, sudangrass and millets, perennial pasture grass species

BRASSICAS – yellow mustard, forage turnip, Daikon tillage radish, forage kale, winter camelina, Essex rape,

OTHER 'FORBS' – buckwheat, sunflower

2. Choose the Timing = Identify Your 'Windows of Opportunity'

When do you want to plant? When do you want the cover crop to finish? What are your crop rotation plans – what is growing there now and what do you want to grow there next?

Spring Planting – spring small grains (spring triticale, barley, wheat, and oats) mixed with forage peas, clovers, yellow mustard, annual ryegrass, clovers

Early-mid Summer Planting – buckwheat, annual ryegrass, soybeans, BMR sorghum sudangrass, open-pollinated corn for forage, Japanese millet, sorghum, cowpeas, sunn hemp, flax, lentil, faba bean

Late Summer Planting – oats mixed with forage peas, and/or forage brassicas such as Daikon radish, mustard, forage turnip, and kale, buckwheat

Fall Planting for winter-kill– oats mixed with forage peas, buckwheat, turnip, mustard, radish

Fall Planting for overwintering - winter triticale, rye, wheat, or barley mixed with Austrian winter peas, dwarf Essex rape, hairy vetch, winter camelina

3. Define Your Desired Goals

Remember – there is no single RIGHT way to make a cover crop mix. There are endless possibilities depending on your particular goals and timing! Do you want a mix that effectively smothers weeds? Erosion and water control? Are you trying to grow more of your nitrogen? Regenerate and fallow land for a season? Provide living soil protection and nutrient stabilization over the winter? Leave minimal residue or living plants in the spring? Stabilize and protect row middles? Begin renovation of cleared land? Pollinator habitat?

Cover-cropping is much like painting a picture or playing a glorious piece of music – we choose from the adapted repertoire of ‘colors’ or ‘notes’, plug in our desired timing and then let creativity grow, only limited by our imagination and creativity (plus price, equipment and seed availability, of course)

4. Soil preparation and planting equipment

Frost seeding – small-seeded legumes (clovers) and yellow mustard can be frost-seeded in the early spring. It is a simple process that involves spinning or broadcasting the seed onto the field when day-night thaw-freeze cycles are still occurring. Tiny cracks on the soil surface open as it freezes and thaws and the seed effectively rolls in, planting it. This process works best for clover and mustard seed because they are smooth and round. It does NOT work well for larger seed like small grains, peas or most pasture grasses.

Broadcasting – Of course this is simplest, but it often is the least effective. Much of the seed thrown on top of the soil will be lost to birds, rodents, or simply not have enough moisture to germinate and grow. If you must broadcast, make sure to go over the field with a harrow, rake or roller to ensure good seed-soil contact. Larger seeds like peas and small grains really need to be planted ‘in the dirt’ with complete seed-soil contact – examine at the field to determine if you see seed sitting on the surface. In mixes that contain both large and small seeds, broadcasting will often throw the large seeds farther than light seeds resulting in uneven distribution, unless the spreader makes overlapping passes.

Drilling – A grain drill set for 1-2 inch depth can plant most large-seeded mixes effectively, but small seeds should go in between ¼ - ½ inch deep. When the mix contains some small seed (grasses, clovers) and some large seeds, it will work better to plant small seeds in the grass seedbox for better depth and seeding rate calibration. Sometimes you can plant a mix to an average of 1 inch, but if conditions are droughty, this may not be deep enough for the large seeded species to establish well.

5. Assemble the Seed Mixture

*** Please note that at this time, we sell the components, not the assembled mixtures. ***

There are two very good reasons for this!

Primarily, this is because everyone has different ideas of what they want. We put you in the driver’s seat on this one. Your farm is unique and therefore your cover crop mix should be designed for your particular goals, equipment and timing.

The second reason is that seed of different size, shape and surface characteristics will stratify and settle in a bag, resulting in non-uniform layers. It is better to assemble the mixture just before planting or be able to plant the large seeds and small seeds separately for more uniform coverage.

Please note that the seed mixes percentages are by weight, not by seed count. A pound of clover seed contains nearly twice as many viable seeds as a pound of oat seed.

A Few Simple Cover-Crop Mix Suggestions:

After-the-Harvest Blanket – a cool-season mix that will grow until hard frost. It is great for stabilizing nutrients, adding nitrogen and organic material, providing residue that protects the soil over winter. These species generally winter-kill, leaving the soil mellow and relatively weed-free in the spring. Some people use this mix for a deer plot and add up to 10% sunflower or Boyd soybean seed. Plant August-Sept.

75-100 lb/Acre of 40% 4010 Peas, 40% Oats, 5% radish, 5% forage turnip, 10% yellow mustard

Cozy Winter Blanket – a great mix for fall cover that will over-winter in most Northeast locations and protect the soil into the spring. It will prevent soil erosion, improve soil structure, provide organic matter, and the spring growth is delicious spring forage for grazing animals. The crimson clover adds eye-popping color at bloom and also improve soil nitrogen. Plant mid-August-mid October.

75-100 lb/Acre of 45% winter triticale, 40% Austrian winter Peas, 10% crimson clover
(rye can be substituted for the triticale, vetch for the peas)

Soil Health Plus Blanket – a legume-rich mix to plant either in Feb-March or early August for as a nutrient-dense plowdown in the spring for abundant organic matter and nitrogen. This mix also stabilizes nutrients and provides colorful pollinator habitat. 50-100 lb/Acre of 20% red clover, 10% alsike clover, 40% Oats, 20% 4010 Peas, 10% yellow mustard

Summer Blanket – just what is needed on those long hot summer days and warm nights. This will add lush organic material, weed suppression, pollinator habitat, and nutrient management. Great after small grain harvest or in fallow garden plots, it really loves hot weather! 75-100 lb/Acre of 40% buckwheat, 25% Annual ryegrass, 25% Boyd soybeans, 10% Japanese millet, add 5% sunflower for color!

Season-Long Succession Blanket – Do you want a mix that automatically relays seasonally into appropriate species mixes from spring through the following year? Plant this mix in late June and watch the buckwheat first predominate, controlling weeds, providing abundant pollen to bees, and solubilizing soil phosphorus. As the buckwheat matures, the winter triticale, annual ryegrass and radish will become apparent with some volunteer buckwheat, creating a lush weed-choking grassy blanket through the fall. The triticale and crimson clover will overwinter, providing soil protection, great re-growth, and a crimson feast-for-the-eyes in the spring. Adding some timothy and medium red clover to the original mix can create a cover crop that transitions without extra effort into permanent sod/hay/pasture.

50-75 lb/Acre of 35% buckwheat, 25% winter triticale, 20% annual ryegrass, 15% crimson clover, 5% radish

Pathway Blanket – The best cover crop between garden raised beds or plastic is a mixture of low-growing Dutch white clover and annual ryegrass. Both establish quickly and stand up to foot and light equipment traffic. 3 lb Dutch white clover + 10 lb annual ryegrass per acre of soil surface

Keep it Simple Blanket – Many of us just want to get the job done, simpler the better!

75-100 lb/Acre of each mix

Spring – 50% Oats + 50% 4010 Peas (= oatlage) or 50% Oats + 50% Spring Triticale (= tritilage)

Summer – 100% buckwheat or 80% buckwheat + 20% annual ryegrass

Fall winterkill – 50% Oats + 50% 4010 Peas

Fall over winter - 50% Winter Triticale + 50% Austrian winter pea or 80% rye + 20% hairy vetch

DIGGING DEEPER . . .

There are two ways to define fall cover crops:

LEGUMES (clovers, hairy vetch, peas, alfalfa etc)

which convert nitrogen in the air to a form that plants can absorb. In a forage mix, legumes will improve the protein level and palatability, OR

NON-LEGUMES (buckwheat, cereal/small grains, and crucifers like radish, turnip and mustard) will add organic

matter, improve soil condition and suppress weeds but do not fix nitrogen.

WINTER KILLED cover crops grow in the fall, then die at hard frost leaving a ground-covering residue over the winter, OR

OVERWINTERING cover crops produce some growth in the fall, go dormant during the winter and then grow back in the spring

You don't have to choose one or the other - crop mixtures (peas & oats / rye & vetch / winter peas & triticale / oats & radish) provide multiple benefits at one time!

WINTER-KILLED COVERCROPS

Tillage/Cover-crop Radish (Daikon) –

Numerous studies have shown that corn and soybeans planted after fall cover-crop radish will have significantly higher yields. Additionally, radishes reduce soil compaction by 'punching' holes through compacted layers, improve water infiltration, suppresses weeds and nematodes, and controls erosion in fall and winter months. They scavenge and hold soil nutrients and increase soil organic matter by up to 5 tons/acre. They can also be grazed. Dairy farmers particularly like planting radish after manure application, because they effectively hold the nutrients. Plant in the fall, 40-60 days before the first killing frost. Cover-crop radish will grow rapidly and then winter kill, leaving the soil in great shape the following spring. Radish can be drilled or broadcast followed by a light disking. **One caution** – radishes don't smell good as they rot in the spring, think of your neighbors. PLEASE don't forget to eat your radishes this fall! They are absolutely delicious especially after a light frost and will keep for months in the refrigerator!

Oats and Spring Barley make a great fall cover-crops that produce vigorous grassy growth through the fall without putting any effort into making grain. Their natural allelopathy suppresses weeds while producing lots of biomass. Residue protects the soil over winter and in the spring, the soil is mellow and ready to plant. They also absorb nitrogen, potassium and phosphorus in a stable form through the winter. They can be grown alone or in combination with peas, turnips, or radishes, and can be used as a nurse crop to establish perennial pastures and hay fields. Generally, fall oats and barley should be planted by mid August, at least 40-60 days before first killing frost. Mixed with turnips or peas, this mixture makes great grazing or forage.

Buckwheat is a quick-growing cover-crop that effectively suppresses weeds, solubilizes soil phosphorus, and softens and loosens the soil. Buckwheat performs better than small grains in dry and poorer soils and therefore is a great 'pioneer' crop when bringing abandoned or neglected land back into production or to improve soil structure and control persistent weed problems. Buckwheat is most commonly planted in the summer, although it can also be used as a fall cover.

4010 Forage Peas are legumes, and therefore fix nitrogen. 4010 peas produce excellent vigorous succulent vines that break down rapidly, releasing accumulated nitrogen in a form that other plants can easily use. When

mixed with oats in the fall, or with oats or spring triticale in the spring, the mix is thick and lush, a great source of forage for grazing or chopping, producing a large quantity of rapidly degradable biomass.

Yellow Mustard – for the past couple years, we have been experimenting with yellow mustard as a short-term spring cover-crop, frost-seeding it in March and plowing it under in June before planting red kidney beans. Mustard also does well planted in late August-Sept as a fall cover-crop. We have been amazed how the brief spring growth has significantly raised our dry bean yields and we believe this could be extremely useful for vegetable, garlic and potato farmers to address soil borne disease problems. Like radishes, mustard is a crucifer (in the cabbage or brassica family and produces glucosinolates that suppress root rots and nematodes.

Forage Turnip, winter camelina, dwarf Essex rapeseed, kale, and other forage brassicas

– Short-season brassicas provide valuable cover-crop species diversity and grazable roots, stem and leaf growth 70 to 90 days after seeding. The leaves can be grazed from mid- September until January depending upon temperatures and snow cover. Top growth generally will survive temperatures between 15-20 degrees F, while bulbs are about 5 degrees hardier. The common purple top turnip can yield up to 7000 lb/acre of dry matter. The tops have 17-30% crude protein while roots contain 12-15% protein. Brassicas are excellent nutrient scavengers.

Brassicas are not adapted to wet, poorly drained sites but grow best on well drained soils with a pH between 5.3-6.8 with adequate levels of phosphorus and potassium. Good stands can be established by planting 1.5 to 3 lb/A. The seeds should be planted in rows 6 to 8 inches apart, one-half inch deep, or can be broadcast and then cultipacked or disked. Brassicas can be planted with small grains, such as oats, for fall grazing. Brassicas can also be no-tilled into perennial pastures at lower seeding rates.

Brassicas should not be grown on the same site for more than two consecutive years to prevent buildup of diseases. When planted after June, forage/cover-crop brassicas will miss most of the usual cabbage insects. Like radishes, fall turnips are also absolutely delicious – so you can have your cover-crop and eat it too.

OVER-WINTERING COVERCROPS

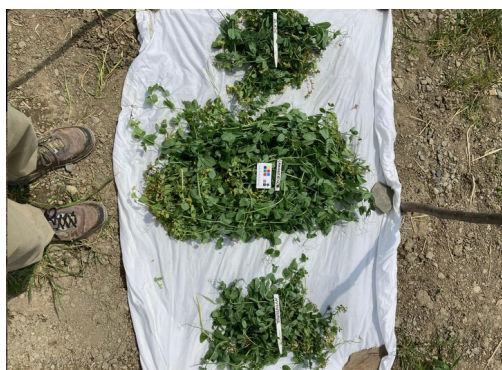
Rye – the hardiest of the cereal small grains, rye can be seeded later in the fall and still produce a tremendous amount of biomass, both leaf and root mass, that will reduce erosion and nutrient loss. Rye's strong allelopathy provides exceptional weed suppression, and also controls nematodes and insect pests. It is widely adapted, and can grow on poorer soils or poorly prepared land. Farmers

often mix rye with about 10% vetch for nitrogen fixing. **One warning** - rye can be incredibly vigorous in the spring, and you may need to mow or chop it before plowing.

Hairy Vetch — vetch is a good example of the old 'truism' that *"one farmer's cover-crop is another farmer's weed."* Vegetable farmers love vetch for its strong nitrogen fixation, soil structure improvement, and weed suppression. Planted as a fall cover-crop with rye or wheat, it produces an early spring cover that can be tilled or rolled before planting vegetable seed or transplants. However, hairy vetch is considered a noxious weed in wheat grown for seed production or milling. Its life cycle almost exactly matches that of winter wheat, with round black seeds that are extremely difficult to separate from the wheat kernels using normal grain cleaning equipment. Flour made from wheat contaminated with vetch seed is bitter with unattractive black specks. Because vetch produces 10-20% hard seed each year, getting rid of it on a grain farm can be very difficult.

Triticale — a cross between wheat and rye, triticale combines the vigor and wide adaptability of rye with the more 'civilized' growth habit of wheat. It is the most forgiving of all small grains, doing well under a wide range of soil types, climates, fertilities, and planting dates. Triticale is highly versatile as a cover-crop, forage, or grain crop, and it can easily be mixed with other species like peas or vetch. There are both winter and spring versions of triticale, expanding its usefulness.

Austrian Winter Peas — few legume cover crops are as impressive as Austrian winter peas! Our **Canandaigua Brand Austiran Winter Peas** produce significantly more forage than other popular winter pea varieties.



Planted in September with barley or triticale, they grow moderately through the fall, and then in the spring simply explode with vigorous viney growth and purple flowers, fixing lots of nitrogen and making highly nutritious and palatable spring forage. The small grain is needed for

support - without it, winter peas will quickly go flat at bloom as they become heavy with leaves and pods. We have also found that small grains also help protect peas against winter kill. About 2 bu barley/A or 75 lb/A triticale is the right amount to provide adequate support for the peas without being too competitive. Winter barley or triticale, mixed with winter peas, makes a highly nutritious and palatable spring pasture for grazing. And there is absolutely nothing tastier for salad than Austrian Winter pea shoots in the spring (*yes indeed, you can have your cover crop and eat it too!*)

Medium Red Clover - the standard, dependable, well-adapted legume cover-crop that organic farmers rely on for much of their nitrogen needs. In the Northeast, we frost-seed red clover into our winter small grains in February-March. It grows through the spring and then grows vigorously after grain harvest. By the following year, the clover plow-down provides ample soil nitrogen to grow a healthy crop of corn or a vegetable crop. Clover can also be sown with a spring small grain before grain emergence. Red clover has also been successfully no-till drilled into wheat stubble in the summer, or overseeded into soybeans in the early fall at leaf-yellowing. Be aware that soil diseases affecting beans, peas and soybeans are also hosted by clover, so close rotations of these crops may technically be rotating crop species, but may not be sufficiently rotating root pathogens.

Other Clovers — Grazing white clover (Rivendell), Ladino white clover, mammoth red clover, crimson clover, yellow sweet clover are great forages and can also be added to cover-crop mixes.

RENOVATING A RUN-OUT PASTURE

Question – “I have a pasture (or hay field) that has gotten weedy and the grass is thin in spots. What can I buy that can be broadcast or no-till drilled that will thicken up the pasture with better stuff?”

How many times have we gotten this question!? Everyone wants a simple answer that requires a minimum of work. Of course, the easy thing would be to just sell them some seed, but unfortunately, that is often not the right answer.

When a pasture or hay field ‘runs out’, growing more weeds than the intended plant species or showing barren patches, there are usually good reasons and if you attempt to re-plant without addressing those reasons, often that expensive new seeding will fail.

Pasture and hay field decline is usually due to three primary reasons –

(1) Soil fertility has dropped and no longer favors best pasture species and growth

Before reseeding, especially if you are overseeding, it is smart to take soil tests to determine if certain nutrients are deficient. Be sure to take a representative sample of the pasture, not just the bad areas, and get the test analyzed for both macro and micronutrients. The soil fertility status can have a huge effect on the growth of intended species and the nutritive value of the forage. Also consider whether lime or gypsum is needed, because low calcium can cause pastures to thin, encourage undesirable tough-to-control weeds to move in, and produce forage of significantly poorer nutritive quality. Certain invasive perennial weeds, like thistle and purple knapweed, thrive in low fertility overgrazed soil, developing extensive underground root systems that make eradication difficult using organic techniques. Reseeding into invasive weed patches alone is not likely to control the situation.

(2) Drainage problems have damaged soil structure and root survival

Has the pasture failed in identifiable areas because of poor drainage or erosion? Before you reseed, you may want to consider installing additional tile drainage or changing cropping patterns to reduce erosion and runoff. If there are problems areas and you can't add additional drainage right now, perhaps you could overseed wet areas and dry areas with specific species that are adapted to wet conditions.

(3) Grazing/harvest management has resulted in thin, uneven and spotty growth

Has the pasture failed in certain areas because of traffic problems or under/over grazing? Before you reseed or overseed, consider whether you should change fencing arrangements, grazing patterns, water availability and other rotational management issues to prevent overgrazing and excess foot traffic. You can get much more feed value out of a well-managed intensive rotational grazing system than from continuous grazing on the same amount of land.

Once these possible causes have been considered and corrected, then it is time to determine whether planting new seed alone will solve the problems, or if a more intensive program of land improvement is needed.

If you decide to simply plant additional seed, the big challenge will be achieving good soil-seed contact. Very often, broadcasting seed onto an untilled old sod will result in much of the seed being caught in the thatch, never actually reaching the soil. This is particularly a problem with light-weight grass seed, but can be a problem with legumes too if the

thatch is thick. Lightly disking the field, broadcasting and then rolling or cultipacking will result in much better soil contact.

For a quick fix, frost seeding medium red clover into a thinning pasture can fill in thin places and improve nutritive content, but as you spin on the seed in early spring, look hard at the existing growth and map out areas of concern to watch more closely. If there are poorly drained areas, consider an improved red clover like Manitoba that is more resistant to root diseases. Alfalfa and/or trefoil can be added to the frost seeding mix.

Species that tolerate droughty areas – orchardgrass, tall fescue, festilolium, brome grass, alfalfa, Reed canary

Species that tolerate wet areas – red, alsike and white clover, meadow fescue, festilolium, Reed canarygrass

Choosing the right pasture grass and legume species that are suited to the soil, climatic, and intended use conditions on your farm is very important. A mixture of grass and legume species is generally better than a single species to provide adaptation to local conditions, with extended pasture quality and maturities.

Cornell University maintains a very useful online 'calculator' for New York that both allows farmers to model the hay and pasture grass/legume species that will thrive on their soil/location, and also has a n extensive 'library' of information on primary perennial forage species.
<http://forages.org/index.php/tools2/36-forage-species-selector-cat>

Obviously SEED now is our primary focus at Lakeview Organic Grain but we also support the growth of our new family business, **Seneca Grain and Bean**, which sells **FOOD**-grade wheat, spelt, einkorn, dry beans, popcorn, lentils and other delicious products grown on our farm. Please check out the website : www.senecagrainandbean.com.

**You are (and YOU always have been)
WHY we are doing this!**

THANK YOU for 30+ years of your
business, support and confidence

Please always feel free to stop by our new office at 1330 Nutt Rd, Penn Yan, give us a call (315-531-1038), or drop us an email at (mh@lakevieworganicgrain.com).