

### LAKEVIEW ORGANIC GRAIN

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# LATE SUMMER 2022 NEWSLETTER

Let's admit it – a glass that is half empty is ALSO half full. That is just called realism.

The rain that makes a perfect field of organic soybeans grow like crazy, that fills the pastures with lush clover, and feeds contented, productive cows ALSO makes the weeds grow, the wheat to sprout before harvest, the cut hay to darken.

The abundant hot sun and long dry days that makes the corn stretch by inches each day ALSO crusts the soil, makes farmers hot, tired and (just a little bit) cranky, and dries up the pasture.

The long days that stretch far into the night to harvest the wheat and cultivate the fields fills the bins with golden grain, produces delicious tomatoes and pristine fields, ALSO creates exhaustion, short tempers, dirty jeans and neglected families.

An essential job, packed with demands and constant work makes a business profitable and productive, gives meaning and purpose to our time and effort, and helps others and makes a difference ALSO can feel like a never-ending treadmill of overlapping demands, never done, never good enough, running at unappreciated high speed.

Many many years ago, my mother-in-law-to-be put her hand on my shoulder, looked deeply into my eyes and intently said "The weather will never be right".

I thought she was crazy! Over the years, I have learned how very wise she was.

Never ever have I heard any farmer say "This weather this year is simply fantastic, my crops are amazing, this season is terrific, my machinery is working perfectly, everything looks so good, I am so very grateful for everything going right, and thank you for all you do to support and help me get all this work done!"

Any farmer worth their dirt will ALWAYS have something to complain about - breakdowns, rain, drought, markets, neighbors, weather, breakdowns, their knees, the government, spoiled hay, bugs, neighbors, weather . . . In some ways, complaining is the adrenaline, the lifeblood to push themselves to keep going, doing more, longer hours, working harder, comparing themselves to neighboring farmers, never satisfied, always more to do.

But today folks, it is lovely August here in Upstate New York, where the sun rises early through pink cloud billows over the lakes and then, long dusty hours later, the same sun sets fiery gold in the west. The mornings are a bit chill, but perfect by noontime, with sweatshirts misplaced in tractors, truck seats and on garden paths.

Lovely August in Upstate New York, where there is an abundance of sweet corn and tomatoes, juicy melons and plump blueberries, new potatoes and green beans, our gardens, fields, orchards and plates overflowing with the wealth and sweetness of summer!

It is again time for oat harvest. Last year we were slogging through muddy fields, but this year most of us are in a serious drought. Pastures are dried up, corn looks rather tough, and dairy farmers are reeling from untenably high grain prices. It is difficult to count how many of our long-time dairy farmers either have sold their cows this summer, gone grass-fed, or are seriously considering their options. This is a hard year for organic livestock and dairy farmers without relief in sight.

But still we delight in the joy of pigs on pasture, the long rows of corn tasseling, 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. We delight in the tangible touchable fragrant joy of harvest, the solid 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, yes, all of this - this is what we do, this is who we are.

Lovely August in Upstate New York - look up from the endless work and pesky weeds, breath deep the warm summer air, see the colors, feel the sun, smell the sweetness and feel the delight – it will not last for long!

## CERTIFIED ORGANIC SEED FALL 2022

Triticale – 'Kashong' brand winter triticale for forage or grain organic!	\$35.00/50#
Barley – Equnox 6-row winter feed barley organic! in 48 lb bags	\$30.00/48#
	<b>**</b>
Wheat - Fredrick Blue Tag Soft White Winter wheat organic!	\$35.00/50#
Wheat - Expedition Hard Red Winter wheat organic! in 48 lb bags	\$35.00/50#
Rye –covercrop organic!	\$33.00/50#
Spelt – winter spelt (lightly dehulled) organic!	\$50.00/50#
Oats – Guyanoga brand covercrop oats organic!	\$24.00/50#
Peas - Austrian Winter organic!	\$52.00/50#
Peas - 4010 purple forage organic!	\$45.00/50#
Hairy Vetch conventional!	\$170.00/50#
Turnip - Barkant forage Conventional untreated in 25 lb bags	\$68.00/25#
Buckwheat organic!	\$60.00/50#
Radish - Covercrop tillage organic!	\$195.00/50#
Mustard - Yellow Conventional Untreated only	\$130.00/50#
BMR sorghum sudangrass Viking 210 organic!	\$105.00/50#
Japanese Millet Conventional Untreated	\$55.00/50#
Clover - medium red organic organic!	\$200.00/50#
Clover – Manitoba red Organic! (disease resistant)	\$215.00/50#
Clover – Crimson organic!	\$150.00/50#
Clover – Alsike organic!	\$195.00/50#
Alfalfa – Viking 3800 organic!	\$260.00/50#
Pasture/Hay Seed Mix - organic! in 25# bags	\$120.00/25#
Annual ryegrass organic!	\$90.00/50#
Timothy – Climax organic!	\$200.00/50#
Birdsfoot Trefoil Conventional Untreated only	\$280.00/50#

Other organic & conventional untreated grass seed varieties

Radish, October



Austrian Winter Peas, May



please ask

Alsike Clover, June

Do you have questions about what cover crops, forage or grains will do best on your farm? Please call us for more information!

#### **RECOMMENDED SEEDING RATES**

Crop	planting date	Seeding Rate/A	Seeding Depth
Winter Triticale	mid Sept - late Oct	100 - 150 lb/A	1 - 2"
Winter Wheat	mid Sept - mid Oct	120 - 180 lb/A	1 - 2"
Winter Spelt (dehulled)	mid 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 - late Oct	100 –150 lb/A	1-1.5"
Covercrop oats	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"
Forage peas	until early Sept	60-100 lb/A	1"
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 covercrops	
Forage Turnip	August	1.5–3 lb/A	1"
BMR Sorghum sudangrass	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"
Pasture/Hay grass mix	spring, fall	3-8 lb/A	

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

#### -All seed must be paid in full at time of delivery/pickup. -Delivery costs are NOT included in seed price.

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- 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 <u>always</u> call 24 hours in advance so we can have your order ready for you!

**Teals Express** – a really great family-owned trucking company out of Watertown, they ship pallets throughout the northeast. Most places will cost around \$200/pallet (up to 2500 lb per pallet) for farm delivery, your forklift unload.

YRC, Rist or FedEx – for pallet (LTL) delivery outside the Northeast, rates vary with location. Call for a quote.

**UPS** – delivery in 2 days, only cost effective for 5 bags or less. The UPS charge is usually about \$35/bag.

**Wilson Transport** – a great family company out of Arcade doing a pallet delivery route from Penn Yan west to past Buffalo. The delivery cost is \$50/up to 1000# or \$90/T. There is a first time charge of \$25 for all initial deliveries.

**Our feed truck** – we can sometimes deliver bags of seed to your farm or a farm near you when we make feed deliveries. Active feed customers take priority if space is limited. The delivery cost is \$1.50/ 50 lb bag.

## FALL SMALL GRAINS . . . What are my choices?

**Barley** must be planted early in the fall, usually in early September, approximately1-2 weeks before usual wheat planting, to be sufficiently wellestablished before winter. It will also 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. Barley produces good quality silage or hay, producing high quality, highly digestible forage, lower in acid detergent fiber and lignin than other small grains, but it yields less tonnage. Most Northeast barley is used as feed, but there is a small, growing market for 2-row malting barley to make local craft beers. Plant at 2-3 bu/A.

**Triticale** is a good 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. It is also the most adaptable, most forgiving grain, doing well in most locations under less-than-perfect conditions. You should plan a market for triticale grain before planting because it can be difficult to sell. For high quality forage, triticale should be harvested at the boot stage and may require more time for wilting than rye and wheat. Triticale should be seeded at 2 bu/A in late September through late October, although we have seen triticale sown even into November make a decent crop. 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 Frederick 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. It is a good choice following soybean harvest. Wheat can also be sown in the fall for spring grazing. Wheat is well adapted to most soils, performing best on loamy, well-drained soils with medium to high fertility. Wheat 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 a weak market for soft red wheat, make sure you plan the destination & market before planting – feed triticale or barley can be easier to sell than organic feed wheat

**Spelt** - this ancient wheat has a persistent hull that must be removed 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. The rapid growth of rye, both in fall and spring, makes it productive for pasture at times when other forage may be in short supply. Forage rye can become unpalatable when over-mature and can impart off-flavors to milk. There is an emerging market for larger-grain hybrid rye, intending for distilling or baking. We are offering hybrid rye this year for larger kernels and much higher grain yield, especially for the food/baking market. Please call for more info on growing hybrid rye. Rye infected with the fungus ergot can cause abortions and other problems. Excessive nitrogen can cause lodging. As a cover crop, rye strongly suppresses weeds, but may leave a residual effect in the soil that can damage vegetables, especially cucurbits.

#### FALL COVER CROPS! . . . What are my choices?

It seems that cover crops are on everyone's mind right now – the vegetable farmer seeking soil cover over the winter, the grain farmer needing help with pesky weeds, the dairy farmer looking ahead for earlier forage next spring, even the conventional farmer trying to reduce high fertilizer bills. Cover crops make so much sense – they cut fertilizer costs, improve soil health and condition, prevent soil erosion, improve water-holding and infiltration capacity, produce nitrogen, and much more.

Cover crop mixtures make even more sense! Get multiple benefits plus synergies by combining 3-4 different species. \*<u>Call us for cover crop mix suggestions!</u>\*

One way to categorize cover crops is by whether they are

(1) **LEGUMES** (clover, hairy vetch, peas, alfalfa) which can convert nitrogen in the air to a form that plants can absorb, in a mixture, legumes will also enhance the protein level in other companion crops

(2) **NON-LEGUMES** (buckwheat, cereal/small grains, and crucifers (like radish, turnip and mustard) which add organic matter and suppress weeds but do not fix nitrogen.

Both groups are strategically useful tools in our crop rotation line-up. Often you don't have to choose one or the other - mixtures of different cover crops (peas & oats / rye & vetch / winter peas & triticale / oats & radish) provide multiple benefits at one time!

Another way to categorize fall-planted cover crops is by whether they :

(1) will grow all fall, then will **winter-kill** at hard frost, leaving ground-covering residue over the winter

(2) will produce some growth in the fall, go dormant during the winter, and **then grow back in the spring** 

#### WINTER-KILLED COVERCROPS

**Tillage/Covercrop Radish** – Numerous studies have shown that corn and soybeans, planted after fall covercrop radish, will have significantly higher yields. Additionally, covercrop radish reduces soil compaction by 'punching' holes through compacted layers, improves water infiltration, suppresses weeds and nematodes, and controls erosion in fall and winter months. They scavenge and hold soil nutrients at the surface and increase soil organic matter by up to 5 tons/acre. Dairy farmers particularly like planting covercrop radish after manure application, because they effectively hold the nutrients. Plant in the fall, 30-60 days before the first killing frost. Covercrop radish will grow rapidly through the fall, and then winter kill, leaving the soil in great shape the following spring. Radish can be drilled, or broadcast followed by a light disking. Grazing is also successful. **One caution** – covercrop radishes don't smell good as they rot in the spring. <u>PLEASE don't forget to eat your</u> <u>radishes this fall! They are absolutely delicious, especially</u> after a light frost, and keep for months in the refrigerator!

**Oats and Spring Barley** make a great fall covercrops 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. By spring, the small grains are gone, leaving the soil mellow and ready to plant. They also absorb nitrogen, potassium and phosphorus, holding nutrients 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 for the establishment of perennial pastures and hay fields. Generally, fall oats and barley should be planted by mid August, or 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 covercrop that very effectively suppresses weeds, solublizes 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 when working on soil structure or 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 produce 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 resulting growth is thick and lush, a great source of forage for grazing or chopping, or as a very effective, high biomass, nitrogen producing, rapidly growing covercrop.

**Yellow Mustard** – for the past couple years, we have been experimenting with using yellow mustard as a short-term spring covercrop, frost-seeding it in March and plowing it under in June before planting red kidney beans. It also does very well planted in late August-Sept as a fall cover crop. We have been amazed how the short spring covercrop has significantly raised our dry bean yields and feel 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 brassica family), producing glucosinolates that suppress root rots and nematodes.

#### Forage Turnip and other forage

**brassicas** – Turnips short-season root brassicas that provide roots, stem and leaf growth for rotational grazing or strip grazing 70 to 90 days after seeding. The leaves can be grazed from mid- September until January depending upon critical low temperatures and snow cover. Top growth generally will survive temperatures between 15-20 degrees F, while bulbs will be 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. All brassica crops require good soil drainage and a soil pH between 5.3 and 6.8 for optimum production. Good stands can be established by planting 1.5 to 3 pounds per acre of turnip. The seeds can be planted in rows 6 to 8 inches apart and not more than one-half inch deep, or be broadcast and incorporated into tilled seedbeds by cultipacking, or drilled. Brassicas can be planted with small grains, such as oats, for fall grazing. Brassica can be no-tilled into pastures at lower seeding rates so a mixture of brassicas and grass is available for grazing with the grass cover retained to protect the soil during the winter.

Brassicas are not adapted to wet, poorly drained sites and grow best on well drained soils that have a pH between 5.3-6.8 and medium levels of phosphorus and potassium. Brassicas should not be grown on the same site for more than two consecutive years to prevent buildup of standthreatening diseases and, when planted after June will miss most of the usual cabbage insects. Like radishes, fall grown turnips are also absolutely delicious – so you can have your covercrop 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 if not plowed under fairly early, 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 covercrop is another farmer's *weed.*" Vegetable farmers love vetch for its strong nitrogen fixation, soil structure improvement, and weed suppression. Planted as a fall covercrop 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 winter small grains 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 wheat 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 is 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 covercrop, 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 cover crops are an impressive as Austrian winter peas! 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 <u>can</u> have your cover crop and eat it too!)

Medium Red Clover - the standard, dependable, well-adapted legume covercrop 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 takes off after grain harvest. By the following year, the clover can be plowed, providing enough 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.

## SUPPLEMENTAL ANNUAL FORAGES! What are my choices?

**Annual Forages** can provide large amounts of high quality feed in a pinch when perennial pasture growth isn't sufficient – like in years like this one! You can use these annual forages to strategically supplement pasture this fall, or to be growing in the early spring to help you when hay supplies are likely to start running out.

You have to handle annual forage a little different than you would perennial hay or pasture because a lot of valuable feed may be wasted if you don't graze or harvest carefully. You may only want to allow the cows to graze a few hours each day in the annual pastures and then move them back to the perennial pastures, or harvest some for greenchop.

**1. For winter / very early spring grazing** (January/April) – in late winter, try grazing corn stalks in last year's silage or grain corn The cows will eagerly find dropped ears and early weeds like chickweed, and get valuable late winter exercise and sunshine. Some fall-planted brassicas, like forage turnip, can provide winter grazing when there isn't too much snow cover and may overwinter if the winter is mild.

2. For early spring forage (April/May) – if you are *really* lucky, you managed to plant winter triticale, barley, spelt or wheat mixed with Austrian winter peas last September! We have found that by the end of May, barley and winter peas are nearly 3 feet tall and by mid June, they are over 5 feet. This makes for excellent, highly nutritious and highly palatable forage at a time when perennial pastures are just getting going and last year's hay supply is mighty thin. Winter rye can also be used like this, but it gets mature and unpalatable very quickly and has been shown to affect the flavor of the milk if the cows get too much. If you think you might be running short of good forage before pasture starts next year, think about planting some triticale/winter peas this September – you may be very glad to have it!

3. For mid spring/early summer forage

**(April-June)** - Plant small grains like **oats**, **spring barley**, **or spring triticale** mixed with **4010 forage peas** in the early spring for very successful early summer grazing or harvested forage. If planted at several times during the spring, this can provide pastures with sequential maturities. **Yellow mustard** can be frost seeded in March into standing winter small grains as an early mixed forage.

4. For summer forage (July/August)-

In May-July, plant **BMR sorghum-sudangrass or** Japanese millet, either mixed possibly mixed with soybeans, peas or oats. There are also traditional sorghum (milo), sudangrass, and other types of millet. These warm-season grasses do best under dry or hot conditions, and on droughty soils. They do NOT, however, like temperatures below 50 degrees, so planting too early will reduce establishment, and they won't achieve full yield if planted much past mid-July. Open Pollinated field corn can be grazed or planted during this time for forage. We've been very pleased with drilled open-pollinated corn, planted in mid-July at very high population, harvested as forage (not silage) in early October before tasseling. It is very important to ensile corn forage the same day it is cut, otherwise much of the sugar will be lost. **Buckwheat** can also provide high quality, though rather low yielding, forage, but it must be fed cautiously to prevent photosensitization. Warm season annual grasses, like **Annual (Italian) ryegrass and teff,** sown spring through mid summer can provide great late summer and fall grazing. **Forage brassicas** planted in late spring will provide forage in August and September.

#### 5. For fall/early winter forage

**(Sept/Dec)**– We have found that **oats** or **spring barley** planted in early August will not try to make seed but will instead grow a vigorous grassy highlypalatable forage by late September. Fall oat silage can run 15-17% protein if harvested at the first flag leaf stage, though it can produce higher tonnage of more digestible feed but slightly lower protein if harvested at the boot stage. **Forage brassicas like turnip or kale, or forage peas,** can mixed with the oats for an extra nutritional boost, and when planted in early August, will provide excellent forage from October-December, though if not grazed, harvest can be complicated a wet fall.

**Tillage-type radish** mixed with oats can also provide nutritious grazing. Later plantings of brassicas and oats can go in on fields that produced small grains or annual pasture earlier in the year. **Turnips and rape** are the fastest growing brassicas, reaching maximum production in 80-90 days, while swedes and kale require 150-180 days. When feeding brassicas, because they are so rich in feed value, introduce them in a limited manner and always feed some dry hay also. Some of the very best forage you will get in the fall will be from **medium red clover** that had been frostseeded into small grains early in the spring. After the grain is harvested in July/August, let the clover grow, and you should be able to get one cutting of very high quality feed in mid-fall.

Some farmers plant **oats and winter triticale** in August, with the hopes of harvesting an oat forage crop in the fall, and a triticale forage crop in the spring. It is important not to harvest the oats any shorter than 3.5 inches to make sure there is enough triticale is left for successful overwintering.



## Summer annual forages . . .

For many of us, this is a difficult season of drought. Many of us are looking at our bales of hay/baleage and wondering if there will be enough for the winter.

**EARLY-MID SUMMER PLANTING** (June-early July) — (1) BMR sorghum/sudangrass or Japanese millet will grow well in summer heat and on droughty soils. (2) Open pollinated field corn can be planted as a forage. (3) Buckwheat can be grazed and chopped. (4) Soybeans can be mixed with all of these! We prefer crop mixtures to get higher tonnage and better quality forage. Most of these will not dry sufficiently to make dry hay – they are best suited as baleage.

**BMR SORGHUM SUDANGRASS** - Plant 1/4 to 1/2 inch, 40-55 lb per acre from June to mid July. For double the protein and energy levels equal to corn silage, cut BMR SS when 36-48 inches tall. At this stage crude protein can run around 15–16%. If you harvest when the BMR SS is taller, yields will be higher but protein will drop, and dry-down may be more of a challenge as there will be much more water in the forage.

To avoid Prussic Acid problems when grazing or green-chopping, wait until plants reach a minimum of 24 inches in height. Do not graze new regrowth that has developed after a frost or period of dry weather. Do not graze horses on sorghum sudangrass, as it can cause cystitis. Green plants that are frosted should be completely dried before grazing or ensiled several weeks before feeding. If BMR SS is properly fermented, prussic acid should not a problem. As with corn, BMR SS can accumulate nitrates. When fermented, and if mixed with other feeds (not the sole forage), nitrates are minimized. If in doubt, run an inexpensive forage nitrate test.

**JAPANESE MILLET** is a warm season forage crop ideal for production of quick hay and/or bedding. It comes on fast, controls weeds and tolerates lower soil fertility better than BMR SS. Plant 1/4 to 1/2 inch, 30-40 lb per acre from June to early August.

While Sorghum Sudan, Pearl Millet, and Sudangrass may produce a higher tonnage than Japanese Millet, they are coarser, less palatable, and dry down more slowly. Japanese Millet is not likely to have problems with prussic acid toxicity. Japanese Millet can get 4 1/2 to 7 ft. tall. Rolling after seeding helps rapid emergence. When planted in June, you can get 2-3 cuttings. Cut the millet

when 3' tall, but leave an 8 in. stubble for quick recovery between cuttings. Cut the 3rd cutting close to the ground.

**OPEN POLLINATED CORN** After trying this for a couple years on our farm, we are recommending planting inexpensive 'ungraded' Wapsie Valley corn in early summer for a quick high tonnage and quality annual forage that can be harvested and ensiled like BMR SS. OP corn works well mixed with BMR SS for increased tonnage. Plant at 20-30 for best yield

We have posted many useful articles and agronomic tips on our website, based on our experiments and experience. We also have all our bagged feed dealers listed – we have dealers throughout New York, PA, and NJ. www.lakevieworganicgrain.com.

And <u>of course</u> we are always happy to visit with you on the phone or if you stop into the mill!

Our customers are <u>always</u> important – you are why we are doing this!

On behalf of all of us at Lakeview – Mary–Howell, Daniel, Jeff, Jack, Andy, Sheila, Neil, Darrin, Klaas and all the others we work with –

We thank you for your continued business, support and confidence!
We appreciate your business and your friendship!
We hope this season is a good, happy, healthy and productive one for you.

#### Please let us know how we can better serve your needs!

