Grafton County Conservation District
www.graftonccd.org
P.O. Box 64, North Haverhill, NH 03774
Grafton County Complex
Mon – Fri by appointment
3855 DCH, Basement Room 30, North Haverhill, NH 03774
(603) 787-6973 or lsokoloski@graftoncountynh.gov

About the Early-Season Cover Crop Mix

What are Cover Crops?

- Cover crops are planted in addition to the main or cash crop. They cover the ground seasonally and provide a variety of benefits based on the plant species used.

Why use Cover Crops?

- Reduce soil erosion
- Provide habitat for beneficial insects and increase diversity of soil microbes
- Increase levels of available nitrogen and soil nutrients
- Add soil organic matter
- Alleviate soil compaction
- Break pest cycles and manage weeds

About the Cover Crops in this mix:

The following information is from the Cover Crop Selector tool (Northeast Cover Crops Council) and King's Agriseeds. Note: contents of this mix may be variable based on year.
Use the tool to learn more about selecting the right cover crop for your needs.
This Early Season Mix was specifically adjusted for New Hampshire

- **Hybrid Turnip** (Barkant Turnip):
  - Annual cold, drought, and heat-tolerant turnip. High yield on high fertility soil, requires good drainage and pH between 5.3-7.5. High sugar and dry matter content makes this turnip ideal for grazing. Bred for leaf production. Useful to extend the growing season for available forage. Do not overfeed cattle on turnips at first. Do not plant in same field for more than 2 consecutive years to prevent disease and pest buildup.

- **Japanese Millet** (*Echinochloa esculenta*):
  - Summer annual grass. Can grow in flooded soils and standing water. Adapted to soil with pH as low as 4.5. Prone to premature flowering if seeded in the late summer. Very responsive to nitrogen. Good smother crop at high seeding rate but may become weed if allowed to go to seed. Mix with cowpeas, soybeans to create a diverse summer mixture. Shorter, finer-stemmed, lower-biomass option compared to sorghum-sudangrass or pearl millet. Does not mow-kill as well and may mature faster/reseed more easily than foxtail millet.

- **Sunflower** (*Helianthus annuus*):
    - Upright summer annual. Black oilseed varieties are most commonly grown for cover crops. Good heat and drought tolerance once established. Sunflower blooms are attractive to people, pollinators, and wildlife. Deep branched taproot, good for pulling up nutrients (but not necessarily subsoiling). Middling weed suppressor. Low seeding rate means low cost. Adaptable in mixes; it may grow tall in a tall mix, short in a short mix.

- **Crimson Clover** (*Trifolium incarnatum*):
    - A cool season annual with a short, upright growth habit. Popular in warmer regions of the Northeast. Shade tolerant. Does not reliably overwinter in plant hardiness zone 5 and colder. Good forage producer, good N-fixer. Showy red blooms, good for pollinators. Can reseed quickly and become a weed. Host to some problem nematodes. Inoculate the seed with appropriate Rhizobium spp.; cross-inoculates with red or white clover. Mixes well with barley, wheat, triticale or annual ryegrass. Larger seeded and better seedling vigor than most clovers. Earlier-seeded, more fall growth, earlier spring bloom than hairy vetch. Slower residue breakdown of stems and N release than vetch.

- **Forage Peas** (*Pisum sativum*):
    - Also known as Yellow Pea or Canadian Spring Pea. Winter-kills if planted in fall. Excellent spring cover crop. Plant early for lush growth; fast-growing varieties are available. Inoculate the seed with appropriate Rhizobium spp.; cross inoculates vetch. Mixes well with upright cover crop species due to its vining growth habit. Lower biomass and total N fixation compared to overwintered peas and other fall-planted legumes.

- **Forage Oats** (*Avena sativa*):
    - Does not overwinter when fall-seeded. When planted in spring or early enough in late summer a good weed suppressor, ok N scavenger, high forage quality and can produce more fall biomass than winter grains. Needs good fertility for maximum benefits. Good nurse crop. Not a host for take-all disease. Mix with radish, peas. Last small grain to mature in spring. Compared to other small grains: lowest overall biomass, slightly lower C:N, lower tolerance for dry/wet extremes.

Cover Crop Considerations:

- **Time of Planting**: What is the main crop you are growing and when must it be planted? When is your soil exposed? Make sure your cover crops are a good fit for your needs.

- **Termination of Cover Crops**: Cover crops need to be terminated before another crop is planted. Some cover crops are winter-killed, but many require other methods. If cover crops are not terminated, they may compete with your other crops.

- **Disease**: Closely related crops can harbor disease. For example: if you are planting brassicas (cabbage, broccoli, mustards), turnip cover crops can host the same diseases.

Learn more about cover crop benefits and limitations with UNH Cooperative Extension & NRCS