

High Energy Forages and Soil Building Cover Crops

Oats as a Companion Crop for Spring-Sown Forage

Use oats spring-seeded with a legume or legume/grass mix. The oats establish quickly, providing early soil cover protecting against soil erosion and helps in weed control. Herbicides can be reduced or eliminated, the oats takes the place of the weeds in the first cutting and first cutting yields are increased. The oats can provide hay or oatlage, or if left to grow, can be harvested for grain and straw. The legume or legume-grass mix will germinate and emerge underneath the oats and establish thicker after the canopy of the oats is opened up at harvest.

When: Spring planting, as soon as soil is dry enough to get in. Virginia & North Carolina (Late February-Mid March); Central PA and South (Mid March –Mid April); Northern PA & New York (Late April- Mid May).

	Seeding Rates as a companion	
	Northern PA & New York	Southeastern PA & further south
Everleaf Oats (true forage oats later heading)	40-50 lbs/acre	20-25 lbs/acre
Jerry Oats	64 lbs/acre	32 lbs/acre
Pea-Oat Mix	60-75 lbs/acre	30 -45 lbs/acre
Oats for Grain	60-96 lbs/acre (2-3 bu)	

Seed at lower end of the range for early planting and in southern locations; use higher rates for later planting (May) or in northern locations. Oats seeded too heavily will compete too aggressively with small seeded forage. Alfalfa: 15-25 lbs/A.

- Alfalfa, Red Clover or other perennial legumes can be started with oats in the spring.
- Alfalfa and Red Cover can be seeded together to increase the protein level of the silage.
- If alfalfa is seeded with oats, the oat crop may be harvested for hay or silage in June (Central PA & South) and in July (Northern PA and New York). After which the alfalfa can be harvested 6 to 8 weeks later.

Forage Grasses can be included: Harvested yield is the single largest driver of profitability when producing stored forage, and alfalfa-grass mixtures often yield more than alfalfa alone.

- Other grass options to be seeded with alfalfa include Italian ryegrass, annual ryegrass, smooth bromegrass, timothy, orchardgrass, tall fescue, festulolium, and perennial ryegrass.
- Using oats or Italian/annual ryegrass companion crop with a spring seeding provides greater year of seeding yield than direct-seeded alfalfa.
- Alfamate can be mixed with legumes and seeded or King's Haymaster or Performance Max can be seeded.
- Orchardgrass and tall fescue have good fall growth that enables a productive fall harvest or grazing while providing more residue than just alfalfa stubble to catch snow and insulate alfalfa crowns, thus improving winter survival.
- At similar stages of maturity, grasses have higher NDF than legumes, but considerably higher NDF digestibility.
- Forage grasses provide fiber in a more digestible form in grass/alfalfa mixes.