Hay Is In Short Supply

The northeast is not immune to short hay supplies. Western areas of the country hit by drought in 2021 are experiencing the same environmental growing conditions in 2022, short on moisture going into the planting and growing season. Hay stocks have tightened to the point where most geographies in the US are experiencing some level of increased hay and forage prices, often with longer hauls when purchasing hay. Hay has traditionally moved from the Western to Eastern states.

However, lower hay inventories have flipped distribution from East to West as growers experiencing extreme drought conditions purchase hay from the Midwest as far East as Kentucky and Ohio. Hay acres will continue to increase in value due to lower supply and higher demand. Eastern forage growers should manage existing and new seeding hay fields accordingly to capture higher price for the foreseeable future.

Spring planting delays in the northeast have farmers scratching their heads about which crop to plant first. There's not much benefit to planting any crop in soil conditions that are too wet. Planting in wet conditions leaves soils compacted, can leave ruts in wet areas of fields, and often results in spotty stand establishment that soon leads to competition from weeds. Wait to perform tillage for seedbed preparation until after soils have had sufficient drainage and evaporative loss to be below field capacity at a good depth.

Tillage preparation and planting alfalfa in wet conditions that cause soil compaction will likely reduce seedling establishment. Compaction leading to waterlogging can cause seedling loss due to root rot pathogens. These effects are detrimental to soil ecology and root health; even mild compaction can affect soil nutrient uptake and plant health. All these factors should be strong deterrents against premature soil preparation and planting of alfalfa in wet soils. In alfalfa, compacted soils can lead to Phytophthora and Aphanomyces root rots when subsequent rains create waterlogged conditions even for short periods of time. Seedling plants grown from seed treated with fungicides can get some early protection from these diseases, but longer-term stand health will be compromised by these pathogens in soils that undergo periods of waterlogging. Select an alfalfa variety with high resistance ratings for these disease organisms if you anticipate any periods of waterlogging over the expected stand life.

If you're on the fence about whether soil is too dry to seed alfalfa, consider that planting into dry soil conditions can be successful only if there is enough surface moisture to get seed germinated and seedlings started, and enough soil moisture to sustain growth for at least six weeks until taproot establishment. If both topsoil and subsoil are dry, its better to wait for sufficient rain and soil moisture even if it means delaying new seedings into late summer.

Evaluate existing stands of alfalfa for productivity potential. Older stands should still have at least 4-5 plants per square foot, but the best stand evaluation technique is to count stems per square foot, since each alfalfa plant can send up several shoots from the crown area following winter dormancy and after each cutting. Fifty-five stems per square foot has been shown to be adequate for high yields.

Even though fertilizer prices have risen, so have hay prices. Older stands of alfalfa that are still productive may have pulled down your soil fertility levels if your fertilizer applications haven't kept up with crop nutrient removal for the past few years. Given current hay prices, now is a good time to soil test and make sure your soil fertility levels are adequate for productive alfalfa growth and yields, especially in older stands that are still thick enough to provide a good yield response if fertilizer is applied.

Consider top-dressing alfalfa after first cutting to maintain yield levels, especially with potassium if soil test potassium is low. Sulfate forms of sulfur can be fairly rapidly available too if needed. Alfalfa requires about 6 pounds of sulfur per ton of dry hay production, and high yielding fields will likely need some supplemental sulfur. Top-dressing phosphorus can boost yields as well when soil levels are low, but tend towards slower uptake and utilization.

The following table provides a list of herbicides labeled for use on alfalfa in most states but does not constitute a recommendation. Your herbicide-use decisions and applications must be made according to full and complete herbicide manufacturer label information, plus supplemental labels for certain uses and states.

TABLE OF HERBICIDES FOR USE IN ALFALFA

(Read and follow label directions, including alfalfa growth stage, not shown in table.)

Timing	Herbicides	Weed Growth Stage	Weeds Controlled	Considerations
Pre-plant burndown, At-plant burndown	Gramoxone Inteon®	Actively growing weeds and grasses	Non-selective broad spectrum	70-day harvest restriction, only one application per season, with varying regional restrictions
Pre-plant burndown, At-plant burndown	Roundup®	Actively growing weeds and grasses	Non-selective broad spectrum	Application must be made prior to crop emergence
Pre-plant Incorporated	Balan™ Eptam®	Germinating broadleaf seeds and emerging seedlings	Broad-spectrum broadleaf control	Soil incorporation or chemigation needed to distribute herbicide in top few inches of soil
Early Postemergence	Buctril®	Broad-spectrum broadleaf control of small weeds up to 2 inches tall	Broad-spectrum broadleaf control	Temperatures over 70 degrees F within 3 days of application can cause crop burn, 30- to 60-day harvest restriction
Postemergence	Butyrac®	Small broadleaf control, with suppression of some larger broadleaves	Broad-spectrum broadleaf control	30-day harvest restriction for established alfalfa, 60-day harvest restriction for seedling alfalfa, can be tank-mixed with Buctril® or Poast® for additional broadleaf and grass control

Timing	Herbicides	Weed Growth Stage	Weeds Controlled	Considerations
Postemergence	Poast®	Actively growing grasses, tallest height controlled varies by grass species, generally 8 inches	Annual and perennial grasses	Harvest restriction 7 days before grazing, 14 days before cutting for hay/haylage, best control before mowing grasses
Early Postemergence and Established stands	Pursuit® Raptor®	Emerged weeds up to 3 inches for most species	Broad-spectrum broadleaf and grass suppression, with control of many broadleaves	30-day harvest restriction
Early Postemergence and Established stands	Warrant® (supplemental label for alfalfa)	Germinating weed and grass seeds	Most annual grasses and broadleaf weeds as they germinate	Up to or at the 4th trifoliate stage of emerged stands, or no later than 7 days after cutting established alfalfa
Early Postemergence and Established stands	Prowl® H2O	Germinating weed and grass seeds	Most annual grasses and broadleaf weeds as they germinate	Do not apply to alfalfa before 2nd trifoliate stage. Will not control emerged broadleaf and grass seedlings
Postemergence and Established stands	Select Max® Section®	Actively growing grasses, generally 2-6 inches in height	Annual and perennial grasses	Harvest restriction 15 days, best control before mowing grasses
Postemergence, only for varieties with Genuity® Roundup Ready® technology	Roundup PowerMAX® or WeatherMAX®	Actively growing weeds and grasses	Broad spectrum of annual and perennial broadleaves and grasses	Do not apply within 5 days of harvest, aim for first application at 3- to 4-trifoliate leaf stage for best early weed control and null plant take-out, no rotational restrictions
Postemergence, Established stands only, not greater than 6" crop height	Chateau®	Emerged seedlings not exceeding 1-3 inches in height	Broadleaf and some annual grass control, including cheatgrass	25-day harvest restriction, up to 12-month rotation interval
Fall and Early Winter Postemergence in established alfalfa, or late-summer seedings after 1st trifoliate stage.	Kerb®	Controls germinating seeds and emerging seedlings	Annual and perennial grasses, including cheatgrass	25- to 45-day harvest restriction, apply during cool temperatures above freezing, up to 55-60 degrees F
Dormant Application in established stands	Eptam® 7E Treflan® 4EC	Germinating broadleaf seeds and emerging seedlings	Broad-spectrum broadleaf control	14- to 21-day harvest restrictions, chemigation needed to carry herbicide into top few inches of soil
Dormant Application in established stands	Velpar® AlfaMax™ Gold	Pre-emergence and early growth up to 2 inches in height or diameter	Non-selective broad spectrum	12-month minimum rotation interval to corn and root crops, 24 months for most other crops
Dormant Application in established stands	Sinbar®	Pre-emergence and early growth up to 2 inches in height or diameter	Seedling annual weeds	24-month rotation interval
Dormant Application	Roundup Original MAX® or PowerMAX®	Apply to actively growing weeds	Control or suppress many weeds including quackgrass, downy brome, and cheatgrass	Supplemental labels refer to a training requirement, 36-hour grazing restriction

Here are a few useful references:

Increase alfalfa hay yields by addressing sulfur deficiency – MSU Extension

Alfalfa Stand Assessment (psu.edu)

LSAlfalfa (wisc.edu)

Harvesting drought-stressed small grains as forage (umn.edu)

Plant forage stands as soon as feasible – Ohio Ag Net | Ohio's Country Journal (ocj.com)

Wait For It Alfalfa (swseedco.com)