The Why, What and How of Overseeding Annual Crops in Perennial Pastures

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Overseeding annual crops into perennial pastures is a well-accepted and viable practice. However, there are several things to consider before you start. Your answers to the why, what and how questions below will guide you to the best fit for your operation.

WHY: WHAT IS THE GOAL OF THE OVERSEEDED CROP?

We overseed other crops into perennial pasture crops for many reasons.

The two most common goals are:

1. Extending the grazing season by adding an annual crop that grows in an alternative season to the perennial crop.
2. Overseeding legumes to add nitrogen to the soil for perennial forage growth.

Overseeding also can be used for:

• Improving overall forage quality by adding a higher quality annual, such as an annual clover, to a lower quality perennial, such as toxic endophyte-infected tall fescue.
• Increasing soil organic matter to increase water-holding capacity.
• Adding biological diversity to a monoculture system.
• Improving soil health by adding living roots to soil year-round.

All of these fit hand-in-glove with the sustainable, or regenerative, agricultural management systems being promoted today.

WHAT: INTO WHAT PERENNIAL FORAGE CROP WILL YOU BE OVERSEEDING?

Is the perennial forage warm-season, such as bermudagrass or Bahiagrass? Or a cool-season forage, such as tall fescue, orchardgrass or wheatgrass? While we want to reap the benefits of an overseeded crop, we don’t want to damage the primary crop. For instance, a

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common practice is to overseed annual ryegrass in bermudagrass pastures. This can be a very beneficial, but if the ryegrass is not grazed or hayed off, it can severely compete with, or even smother out, the bermudagrass.

HOW: WHICH PLANTING METHOD WILL BEST ESTABLISH THE OVERSEEDED CROP?
The most important key to establishing any seeded crop is getting good seed-to-soil contact. A very close second is having the seed placed at a depth where it can germinate and emerge with enough energy to establish and thrive. If seed is planted too deep, it either may use all its energy reserves before emergence, die soon after emergence, or have its production significantly delayed or reduced.

Here are planting method options for overseeded crops, with their pros and cons:

The only way to ensure any consistency in planting depth or seed-to-soil contact is to use a properly calibrated planter, usually a no-till drill, for planting into a perennial sod. In order to get good seed-to-soil contact and the right depth, you need to be able to get the seed to the soil, which requires that the perennial forage crop has been managed well. Managing the forage residual is often as much an art as a science.

Methods include grazing, haying or mowing to the desired stubble height, or chemical frosting the primary forage. Chemical frosting is using a low rate of herbicide, usually glyphosate, to mimic a light freeze on the primary perennial forage. This allows the overseeded crops to establish with less competition from the primary forage.

Another seeding option is broadcasting seed and allowing livestock to trample it in. While this option can be successful, it offers the least control over planting depth and soil contact. This option works best with species that are best adapted to very shallow plantings.

A final option is planting green, which means planting into the perennial forage without manipulating that forage. While green planting can be successful, expect that production from the overseeded forage will be significantly delayed and reduced.

These are just a few of the things to consider before overseeding into a perennial pasture. The more you consider the why, what and how for your operation, the higher your odds of success.