U-Pick Case Study #1

Prepared by Nadia Mori PAg

Les Yates, Quick BC

At a glance

Located between Smithers and Burns Lake along Highway 16 is producer Les Yates. Les re-seeded a small hay field to a new forage stand. He uses no-till practices and normally plants a cover-crop during forage stand establishment.

U-Pick Criteria

1. Purpose of forage:

HAY

2. Desired plant type:

TAME SPECIES

3. Desired stand longevity:

AT LEAST 5 YEARS

4. Avg. time for regrowth:

45-60 DAYS REST

5. Field's soil texture:

CLAY-LOAM

6. Flooding tendency:

SATURATED LESS THAN

1 WEEK IN SPRING

FIELD DESCRIPTION



The field is located on a clay-loam soil with a few low spots prone to high moisture conditions. Overall, the field is on a southwestern slope. The pH is slightly acidic ranging from 6.1 to 6.7. There is no known salinity present. Soil fertility on the parcel is low but so is the budget available to address fertility issues adequately. Hay is the primary end-use of the new forage stand with the potential for 4 to 6 weeks of fall grazing, if feed is in short supply.

The field was seeded at 20 lbs per acre in late May 2021 using a no-till drill and a seeding depth of ¼ to ½ inch. One low spot area could not be seeded because of wet conditions. Soil moisture conditions were otherwise good at seeding but rapidly declined under a heat dome in late June. All seed had germinated but struggled under the dry hot spell.

FORAGE U-PICK SUGGESTIONS



Legumes

alfalfa cicer milkvetch

Grasses

meadow bromegrass orchardgrass meadow fescue tall fescue

Producer Insight

Les noted that the U-Pick tool does not include any of the Festulolium varieties.
The perennial Festulolium varieties performed well for Les especially in areas where alfalfa did not readily establish.

Les also seeded a cover crop of peas and barley at 70 lbs per acre (about 60% of full rate), seeding the cover crop at 90 degrees to the forage stand and at a depth of just under 2 inches. Over the years, Les found it critical to seed the cover crop in separate furrows, at different seeding depths, and ideally at an angle to the forage crop to minimize competition. The cover crop was harvested for greenfeed in late summer and is an economical choice as Les needs some production during the forage establishment year. Les suspects that the cover crop helped shade the under-seeded forage stand during the hot weather. In the fall, it looked like the forage stand may need to be re-seeded but Les was pleasantly surprised to find the stand off to a good start in spring 2022.

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PRODUCER BLEND



Les chose a custom blend based on his years of experience of growing forages in the area. Seed was sourced from DLF Pickseed through the Smithers feed store.

Legumes

25% Instinct alfalfa 25% 2065MF alfalfa 25% 3006 alfalfa 5% Bull birdsfoot trefoil

Grasses

15% Echelon orchardgrass 5% Winnetou timothy



Making your final selection

Although not suggested by the tool, producer Les chose to include a small amount of birdsfoot trefoil as a non-bloat legume and timothy as a secondary grass. Timothy was not suggested by the tool as it requires 60-80 days rest between harvests, which may not be the case if the stand is used for hay and potential fall grazing. Birdsfoot trefoil was not suggested by the tool because of longevity assessed below 5 years unless the plants are allowed to set seed.

Les was happy to give the tool a try, however he felt it was not able to duplicate his many years of experience and on-site knowledge. Overall, the tool did a reasonable job in narrowing down the forage species suggested. As a tool it will likely not be able to pick up on subtle site-specific nuances. For a more detailed recommendation, the results from the tool should be compared against site specific experience and /or reviewed with a professional agrologist.













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