

## Nutritional Status of Crop Cocktails and Preference Evaluation

The ability of crop cocktails to improve soil health has been widely explored in previous research, which shows their potential to substantially improve soil health.

This project evaluates how a number of annual crop cocktail blends grown on previously overused land can improve soil health and provide adequate nutrition for cattle. Three Union Forage cocktail blends were tested.

Blend name	Blend composition
<b>UF Relay</b>	50% Crusader Italian Ryegrass 20% Hairy Vetch 15% Hunter Leaf Turnip 15% Winfred/Goliath Forage Rape
<b>UF Ultimate</b>	30% Crusader Italian Ryegrass 30% Hairy Vetch 10% Winfred/Goliath Forage Rape 10% Crimson Clover 10% Hunter Leaf Turnip 10% Graza Fodder Radish
<b>UF Rocket Fuel</b>	30% Crusader Italian Ryegrass 15% Tonic Plantain 20% Red White Renew Clover Blend 20% Crimson Clover 15% Choice Chicory

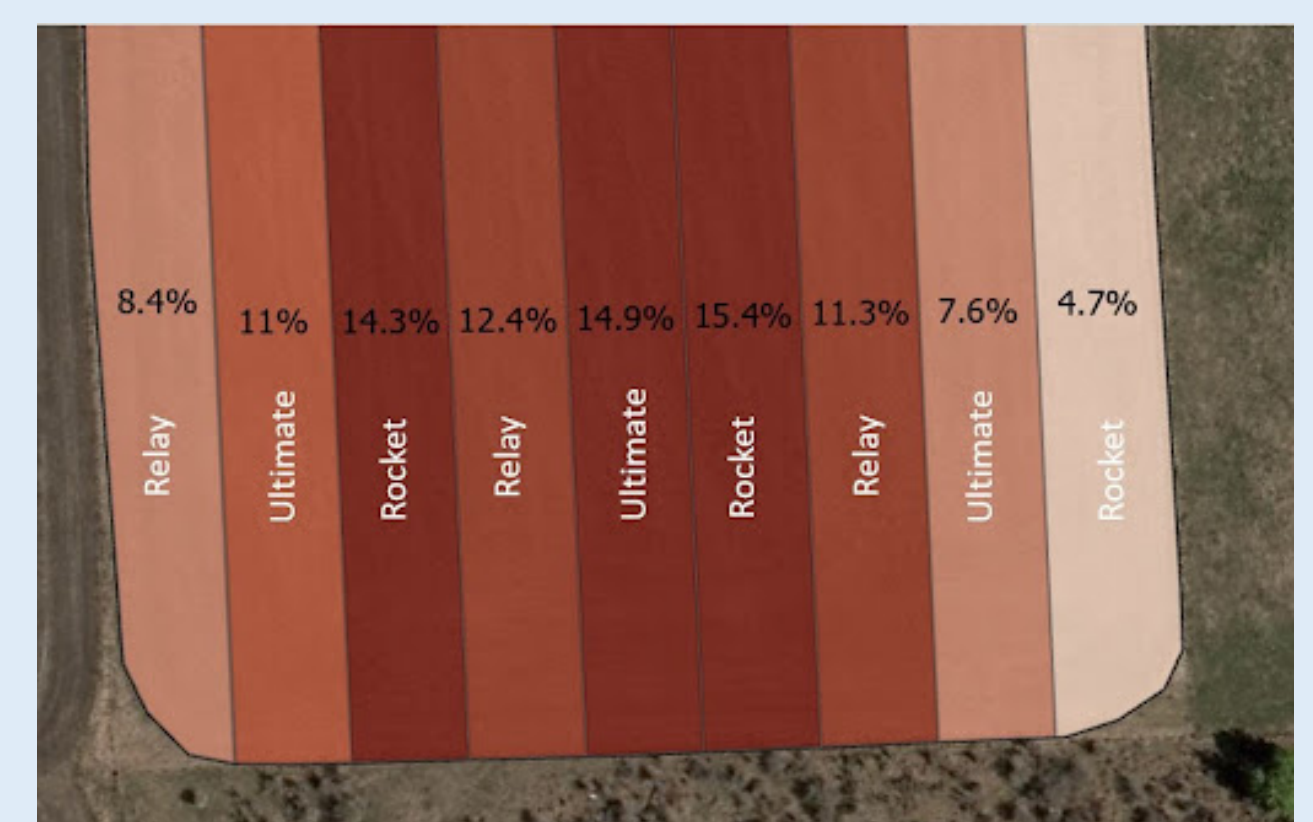
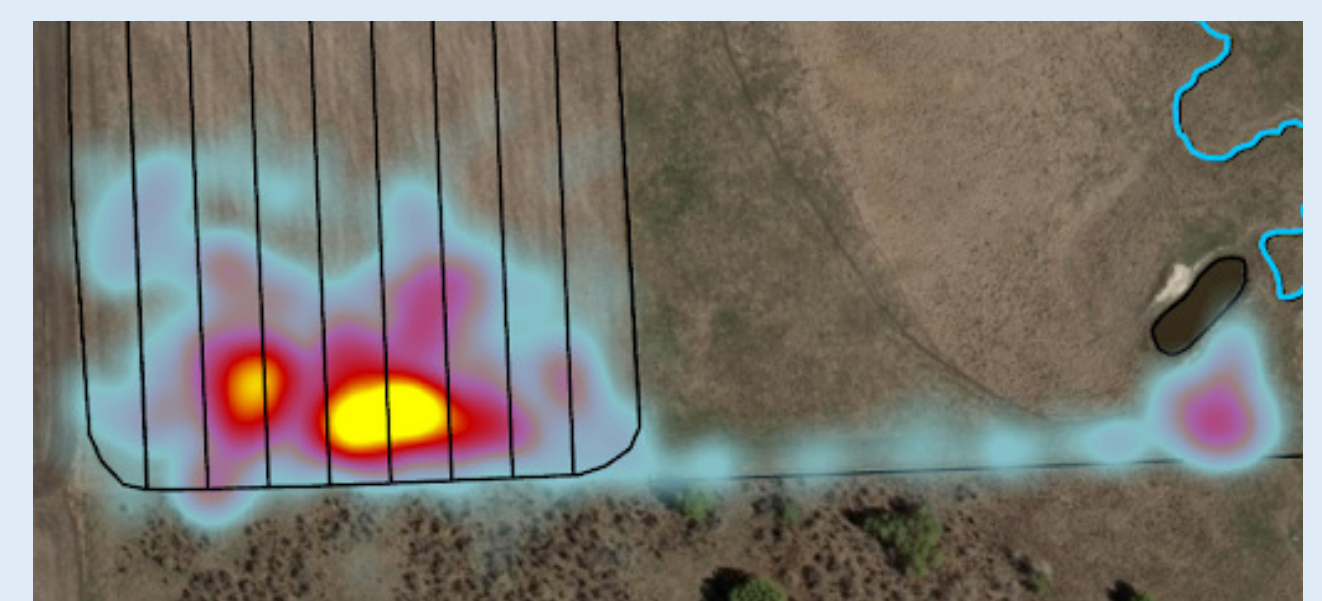
Side-by-side disposition of the Union Forage cocktail blends in rows running North/South. Each blend was replicated three times in rows 70 ft wide.



Movable electric fences (shown in red) were set up running east/west forming paddocks of approx. 1.7 to 2.0 acres and 130 ft wide. Cattle were allowed to graze for approx. two days in each paddock.



By using GPS collars on the cows, cattle's preference for each crop blend was evaluated. The amount of time spent by the cattle on each crop cocktail blend is shown by the heat map and percentage breakdown.



### Preliminary results:

Cattle preference per crop cocktail blend may have been related to the overall geographic characteristics of the pasture rather than palatability.

Considering only preference by cattle, there appeared to be a slight overall preference for the Rocket Fuel blend.

### Future research:

Results on soil health and forage quality from the 2020 and 2021 grazing seasons will be made available in 2022.