The Effect of the FLFE Service on the Yield of Organic Red Wheat: Phase 2 Study with Wecker Farms

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Keywords

Plant Vitality • Plant Growth • Organic • Wheat • Focused Life-Force Energy • FLFE • Crop Yield Experimental Plant Program • Food • Sustainability • Blinded Design

Abstract

Healthy food production is facing challenges across the world. Finding innovative solutions to support growing organic and healthy foods is vital to our existence. Focused Life-Force Energy (FLFE) has developed a consciousness-raising service that focuses on enhancing the environment in which humans, plants, and animals can thrive. This Phase 2 double blinded study examined the effects of the Standard FLFE service and the Experimental Plant Program developed by FLFE on the yield of organic red wheat in a large commercial farm setting. A 22.88% increase in the yield of the crops was observed for FLFE-activated areas of the field.

Introduction

Agriculture significantly impacts the environment due to three key factors: the requirement of large amounts of fresh water, greenhouse emissions, and land use that often results in a loss of natural habitat [1]. Finding new ways and methods or rediscovering old ways and methods of growing food efficiently and organically, is crucial as humanity is facing ever increasing food prices, inflation, and potential food shortages [2-3].

Focused Life-Force Energy (FLFE) has developed a consciousness-raising service that, among many effects, is aimed at enhancing the environment in which humans, plants, and animals can thrive (<u>https://www.flfe.net/</u>). Its effects and mechanisms of action are not yet fully understood. This research study aims to provide evidence in a commercial farm setting of the benefit of FLFE's high-consciousness field for plant growth and vitality.

Background

The success of a plant depends on multiple factors that can affect seed germination, plant growth, and overall plant vitality.

Factors that affect seed germination [4] may include specific seed traits [5] and seed dormancy [6]. Environment also plays a major role on seed germination, and factors such as soil texture [7], soil moisture [8], soil pH [9], soil salinity [10], oxygen [11] as well as light, temperature, pathogens, and quality of water can have substantial effects [4]. Primary factors that affect plant growth and vitality include water, temperature, light, humidity, and nutrients by influencing growth hormones in the plant [12-13].

There are other factors that may influence the growth and vitality of plants: sound waves [14-15], electrical grounding (i.e., electroculture) [16-17], and human intention [18-19]. While these factors may not be considered 'mainstream', evidence suggests that they can have a positive effect on plants.

Many countries are facing rising prices of food among those of other necessities [2-3]. Finding creative and affordable solutions for increasing the production of healthy, organic, whole foods will be essential.

FLFE is a Canadian company offering a consciousness-raising subscription-based service for a property or around an object. The FLFE system is designed to focus available life-force energy and to activate a high consciousness field at a specified location (i.e., legal address or geographic coordinates) or around a personal object (i.e., mobile phone). The higher-level

Note: The Introduction and Background sections across all white papers on the topic of FLFE's effects on plant growth and vitality are very similar. This was done to ensure that all relevant information is included in each white paper and that each white paper acts as a standalone publication when read individually.

consciousness field, in combination with other enhancements, is intended to increase the beneficial nature of the local environment for everyone and everything in that environment, including humans, animals, and plants. Specifically, both the Standard FLFE service as well as FLFE's Experimental Plant Program are intended to create an environment where life force can be harnessed by the plants, thus increasing plant vitality.

One of the main effects of the FLFE service, spontaneously reported by FLFE's customers, is increased vitality and overall health changes of their plants (<u>https://www.flfe.net/ces-results/</u>).

The FLFE service claims are extraordinary [20] in terms of mainstream science and a number of experiments, such as the one detailed in this paper, have been conducted to explore the effects of the purported beneficial environmental changes and their effects on human, animal, and plant life. FLFE's experimental philosophy is to first explore the effects (i.e., 'Is something happening?') and then, when possible and practical, explore the mechanisms of action (i.e., 'How is it happening?'). For more information, please refer to the FLFE Gold Standard of research (for more information, see <u>https://www.flfe.net/research</u>).

Methods

Our hypothesis was that an FLFE activated higher level of consciousness area within a farmer's field would increase germination, yield, and the vitality of the plants.

FLFE conducted an experiment with Wecker Farms, located in Saskatchewan at the time, using organic red wheat as the target crop. The independent variables were:

- FLFE Standard (i.e., Flagship) Service. An FLFE Property service was activated within a defined section of the farm experimental area. This is the full FLFE service environment at the Level of Consciousness (LOC) of 560 (at the time) using the theory and method created by Dr. David Hawkins [21].
- FLFE Experimental Plant Program. An enhanced FLFE high-consciousness area designed for support of plant growth was activated within a defined section of the farm

experimental area. This experimental FLFE environment is designed to specifically support plant growth and vitality. Targeted highconsciousness fields of up to 850 LOC were applied and additional support for the soil biodiversity was provided.

3) Control. No FLFE service was activated within a defined section of the farm experimental area (i.e., the Control acres were at their usual LOC).

The dependent variable was volume of the yield of the crop (i.e., bushels per acre). This is calculated by the combine, which is calibrated every minute and adjusted for moisture content.

The experimental area, including the Control, FLFE Standard, and FLFE Experimental Plant Program were contained within the entire farm field. The farm field was a contiguous location of 640 acres that had consistent terrain and shading. Water supply was consistent throughout the farm field.

Each acre within the farm field acted as one datapoint in the experiment. During harvesting, the combine measured the yield for each acre in the farm field and produced a map at the end of the day, information for which was logged on the Wecker Farms account of myjohndeere.com service. The farm field was divided into one-acre increments. Each one-acre increment was 45 feet wide (a full-cut of the combine) and 968 feet long. Each one-acre increment was reported on the map. The Control section consisted of 375 acres or 375 one-acre datapoints. The FLFE Standard Service section was in two 15-acres plots, separated from each other in the farm field. This resulted in 30 datapoints. The FLFE Experimental Plant Program section was in three 15-acre plots, in a continuous line, resulting in 45 datapoints. Each section was assigned a letter code of "A" or "B". The farmers did not know the independent variables assigned to each grid section. Planting occurred in the first week in May and harvesting was done in late August of 2021.

Wecker Farms invited FLFE to be a partner in myjohndeere.com and shared the data so that we could subdivide the Control and FLFE acres. Subdivisions were created using the tool on the website. There was a total of 6 FLFE subdivisions: FLFE1, FLFE2, and FLFE3 subdivisions had Standard FLFE Service while FLFE4, FLFE5, and FLFE6 had the Experimental Plant Program. There were also 26 Control subdivisions. The first Control subdivision, C1, was adjacent to and immediately below the lowest FLFE subdivision, FLFE6. C2 was adjacent to and below C1 and so forth for all 26 control subdivisions. Each subdivided section, as well as the FLFE sections, are the width of the field. Please see Appendix A: Control Acre SubdivisionKeywords for the entire field including FLFE1-FLFE6 subdivisions and C1-C26 subdivisions.

Results

Since the number of FLFE subdivisions was too small (3 per each FLFE condition) to analyze by themselves, combining them (n=6) permitted statistical comparison to controls (n=26).

The yield of the FLFE acres of organic red wheat (FLFE Standard and Experimental Plant Program combined) was 22.01 bushels per acre, while the yield of the control acres of organic red wheat was 17.91 bushels per acre resulting in 22.88% increased yield for FLFE acres (see Figure 1; t(30)=7.70, p<0.0000001).

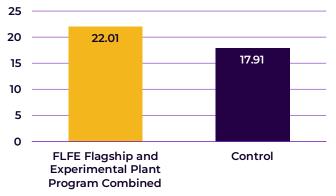


Figure 1. Bushels per acre: FLFE Flagship and Experimental Plant Program combined versus Control.

Limitations

A low number of FLFE acres may have contributed to the percentage of differences observed between the yield of the FLFE acres and control acres. A larger number of FLFE acres may result in smaller or larger difference in the yield and would allow for a more detailed comparison among the three conditions (FLFE Flagship Vs. Experimental Plant Program Vs. Control).

Conclusion and Future Directions

Given the promising results of this and previous studies on the effect of FLFE on plants, the idea that the FLFE service could be used to increase food production and, possibly, the vitality of the plants, would be an important contribution to humanity and the planet itself.

Future studies on this topic may include not only replication and extension studies that would have larger numbers of FLFE-activated conditions, but also explore the effects of FLFE on plants and food in terms of the nutrients available in the food as well as the ability of humans to absorb those nutrients more effectively and efficiently.

Acknowledgements

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References

[1] Ritchie, H., Rosado, P., & Roser, M. (2022). Environmental impacts of food production. *OurWorldInData.org*. Retrieved from <u>https://ourworldindata.org/environmentalimpacts-of-food</u>

[2] Siekierska, A. (2023). Food prices: Here's how much grocery costs went up in November. Yahoo Finance. Retrieved from <u>https://ca.finance.yahoo.com/news/food-pricesheres-how-much-grocery-costs-went-up-innovember-140238181.html</u>

[3] Sweitzer, M. (2023). Summary findings. Food price outlook, 2023 and 2024. U.S. Department of Agriculture, Economic Research Service. Retrieved from <u>https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings/</u>

[4] ECHO Staff and Network Members. (2023). Factors that Impact Seed Germination. Retrieved from <u>http://edn.link/93d29y</u>

[5] Guzmán, M. N. N., Beltrán, L. C., Rodriguez, C. H., & Roa-Fuentes, L. L. (2023). Functional seed traits

as predictors of germination and seedling growth for species with potential for restoration in Caquetá, Colombia. *Trees (Berlin, West), 37*(3), 947-961. <u>https://doi.org/10.1007/s00468-023-02396-3</u>

[6] Graeber, K., Nakabayashi, K., Miatton, E., Leubner-Metzger, G., & Soppe, W. J. J. (2012). Molecular mechanisms of seed dormancy. *Plant, Cell and Environment, 35*(10), 1769-1786. <u>https://doi.org/10.1111/j.1365-3040.2012.02542.x</u>

[7] Soriano, P., Estrelles, E., Martínez-Nieto, M. I., Doménech-Carbó, A., Galiè, M., & Biondi, E. (2022). Environmental predictors of seed germination in two Halocnemum species from Mediterranean (Balearic, Tyrrenic and Adriatic) and Red Sea coastal salt marshes. *Seed Science Research*, *32*(4), 246-263.

https://doi.org/10.1017/S0960258522000253

[8] Zhang, T., Yan, Y., Li, C., Liu, J., Yin, D., Xiong, X., Liu, W., & Yang, Y. (2021). Influence of illumination time and soil moisture on seed germination and seedling establishment of magnolia sprengeri pamp. *Hortscience, 56*(11), 1381-1386. <u>https://doi.org/10.21273/HORTSCI16144-21</u>

[9] Müller, F. L. (2021). Contrasting effects of soil pH on seed germination and early seedling growth of calobota sericea and lessertia frutescens subs. frutescens. *South African Journal of Plant and Soil, 38*(4), 343-345. https://doi.org/10.1080/02571862.2021.1930209

[10] Ye, X., Wang, H., Cao, X., Jin, X., Cui, F., Bu, Y., Liu, H., Wu, W., Takano, T., & Liu, S. (2019). Transcriptome profiling of puccinellia tenuiflora during seed germination under a long-term saline-alkali stress. *BMC Genomics, 20*(1), 589-589. <u>https://doi.org/10.1186/s12864-019-5860-5</u>

[11] Steinbrecher, T., & Leubner-Metzger, G. (2017). The biomechanics of seed germination. *Journal of Experimental Botany*, 68(4), 765-783. <u>https://doi.org/10.1093/jxb/erw428</u>

[12] Poling, K. (2021). Understanding primary factors driving plant growth. *Ohio's Country Journal*. Retrieved from <u>https://ocj.com/2021/07/understanding-primary-factors-driving-plant-growth/</u> [13] VanDerZanden, A. M. (2008). Environmental factors affecting plant growth. *Oregon State University, OSU Extension Service*. Retrieved from <u>https://extension.oregonstate.edu/gardening/tech</u> <u>niques/environmental-factors-affecting-plant-</u> <u>growth</u>

[14] Hassanien, R. H., Hou, T., Li, Y., & Li, B. (2014). Advances in effects of sound waves on plants. *Journal of Integrative Agriculture*, *13*(2), 335–348. <u>https://doi.org/10.1016/s2095-3119(13)60492-x</u>

[15] Creath, K., & Schwartz, G. E. (2004). Measuring effects of music, noise, and healing energy using a seed germination bioassay. *The Journal of Alternative and Complementary Medicine (New York, N.Y.), 10*(1), 113. https://doi.org/10.1089/107555304322849039

[16] Christianto, V., & Smarandache, F. (2021). A review on electroculture, magneticulture and laserculture to boost plant growth. *Bulletin of Pure & Applied Sciences. Sec. B, Plant Sciences, 40b*(1), 30-34. <u>https://doi.org/10.5958/2320-</u> <u>3196.2021.00006.9</u>

[17] Schwartz, G. E., Ashford, S., Woida, G., & Chevalier, G. (2012). Earthing and vitality: Replicated electrical grounding effects photographed in plants. *The Earthing Institute*. Retrieved from

https://earthinginstitute.net/earthing-plantexperiment-for-schools/

[18] Shiah, Y., Hsieh, H., Chen, H., & Radin, D. I. (2021). Effects of intentionally treated water and seeds on the growth of Arabidopsis thaliana. *Explore (New York, N.Y.), 17*(1), 55-59. <u>https://doi.org/10.1016/j.explore.2020.04.006</u>

[19] Schwartz, G. E., Boccuzzi, M., McTaggart, L., & Connor, M. (2009). Effects of distant group intention on the growth of seedlings. ScientificExploration.org. Retrieved from https://www.youtube.com/watch?v=bb4lWf4jNTQ

[20] Schwartz, G. E. (2021). Extraordinary claims require extraordinary evidence: The science and ethics of truth seeking and truth abuse. Waterside Productions. [21] Hawkins, D. R. (2014). *Power vs. force: The hidden determinants of human behavior*. Hay House, Inc.

Appendix A: Control Acre Subdivision

The entire field image is below (Figure 2). The markers at the top are the boundaries of the FLFE areas. The FLFE subdivisions are inward from the top edge of the field. The final control subdivision at the bottom, section C26, was also positioned in from the bottom edge of the field.

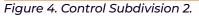
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Figure 2. The Entire Field Image indicating the FLFE subdivisions. Control area is also in this image, but it is not specified.

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Figure 3. Control Subdivision 1.

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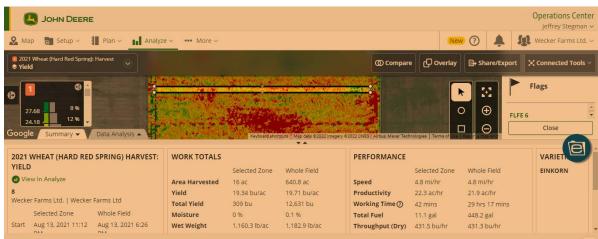
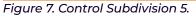


Figure 5. Control Subdivision 3.



Figure 6. Control Subdivision 4.

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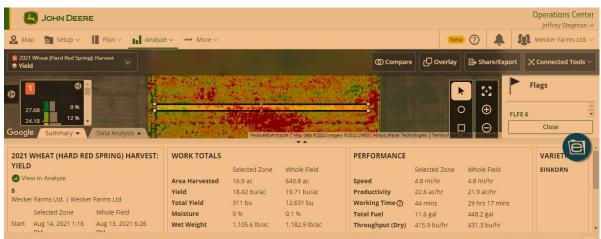
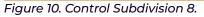


Figure 8. Control Subdivision 6.

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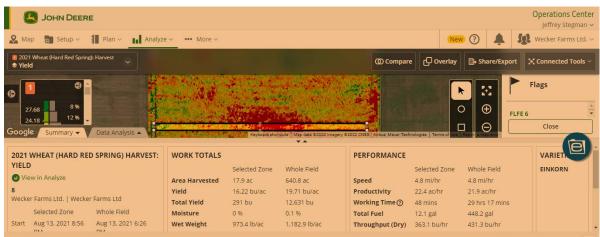


Figure 11. Control Subdivision 9.

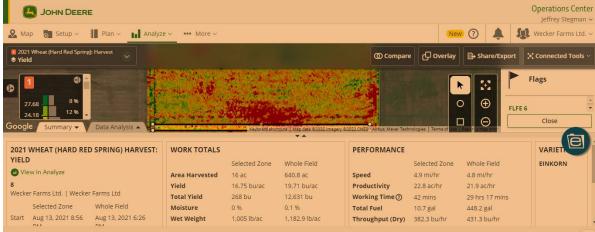


Figure 12. Control Subdivision 10.

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Figure 13. Control Subdivision 11.

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Map 5 Setup - 🚹 Plan - 📊 Analyz	e 🗸 🚥 More 🗸				Nev	. 🔍 🜔	Wecker Farms L
2021 Wheat (Hard Red Spring): Harvest Yield				() Compar	e Overlay	🕞 Share/Exp	ort 🗙 Connected Too
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27.68	·	The Trans	and the second		(FLFE 6
		And the second second second second					Point 1/13/2022
21.39	Same and State	the share in				⊐∥⊖∥°	-onite 1715/2022
18.75 21.99	the second	(hereiten)	AND				FLFE 5
18.75 21 %					t		
18.75 21 %		Keyboard short	touts Map data ©2022 Imag	ery 62022 CNES / Airbus, Maxar Tech	t		FLFE 5
18.75 21 % 18.75 18 % ogle Summary - Data Analysis -	WORK TOTALS	Keyboard short		ery 62022 CNES, Airbus, Maxar Tech PERFORMANCE	t		FLFE 5
21 WHEAT (HARD RED SPRING) HARVEST: ELD	WORK TOTALS	Keyboard abort			t		FLFE 5
21 WHEAT (HARD RED SPRING) HARVEST: ELD	WORK TOTALS Area Harvested		**		nologies Terms of de		FLFE 5 Close
21 99 18.75 21 90 18.95 Data Analysis 21 WHEAT (HARD RED SPRING) HARVEST: ELD View in Analyze		Selected Zone	Whole Field	PERFORMANCE	nologies Terms of Inst	Whole Field	FLFE 5 Close
21 % 18.75 21 % 18.8 Data Analysis 21 WHEAT (HARD RED SPRING) HARVEST: ELD View in Analyze	Area Harvested	Selected Zone 16.2 ac	Whole Field 640.8 ac	PERFORMANCE	selected Zone 4.9 mi/hr	Whole Field 4.8 mi/hr	Close VARIETIES
18.75 21 % 18.75 18.6	Area Harvested Yield	Selected Zone 16.2 ac 17.96 bu/ac	Whole Field 640.8 ac 19.71 bu/ac	PERFORMANCE Speed Productivity	Selected Zone 4.9 mi/hr 22.8 ac/hr	Whole Field 4.8 mi/hr 21.9 ac/hr	Close VARIETIES

Figure 14. Control Subdivision 12.

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🞗 Map 📓 Setup 🗸 🚺 Plan 🗸 📊 Analyz	e 🗸 🚥 More 🗸				Nev	. 🕄 🌔	Wecker Farms Ltd. v
I 2021 Wheat (Hard Red Spring): Harvest ♦ Yield				@ Compar	e 🗘 Overlay	🕞 Share/Exp	ort X Connected Tools ~
27.68 8% 24.18 12% 21.39 12% 18% 18.75 12% 18% 18.75 12% 18% Data Analysis		Keyboard ahor	tous Mapidate 92022 (ma	ary SO22 CHES/ Arbus Marar Ted			Flags FLFE 6 roint 1/13/2022 FLFE 5 Close
2021 WHEAT (HARD RED SPRING) HARVEST:	WORK TOTALS			PERFORMANCE			VARIETIES
YIELD		Selected Zone	Whole Field		Selected Zone	Whole Field	EINKORN
View in Analyze	Area Harvested	16.3 ac	640.8 ac	Speed	4.9 mi/hr	4.8 mi/hr	
8	Yield	17.81 bu/ac	19.71 bu/ac	Productivity	22.9 ac/hr	21.9 ac/hr	
Wecker Farms Ltd. Wecker Farms Ltd	Total Yield	290 bu	12,631 bu	Working Time (?)	42 mins	29 hrs 17 mins	
Selected Zone Whole Field	Moisture	O 96	0.1 %	Total Fuel	10.6 gal	448.2 gal	
Start Aug 13, 2021 8:29 Aug 13, 2021 6:26	Wet Weight	1,068.7 lb/ac	1,182.9 lb/ac	Throughput (Dry)	408.3 bu/hr	431.3 bu/hr	

Figure 15. Control Subdivision 13.

							Operations Cent Jeffrey Stegman
Map Setup ~ 3 Plan ~ 1 Analyz 2021 Wheat (Hard Red Spring): Harvest Vield	e v ••• More v			@ Compar	e 🗗 🖸 Overlay		Wecker Farms Ltd
27.68 8% 24.18 12% 21.39 18% 18.75 21% 18.75 21% 18.% Data Analysis ▲	10	Keybard ahor	Kota Map data 42022 (Inte	ery 9 2022 CHES Arbus Marar Ted			/13/2022
2021 WHEAT (HARD RED SPRING) HARVEST:	WORK TOTALS			PERFORMANCE			VARIETIES
		Selected Zone	Whole Field		Selected Zone	Whole Field	EINKORN
YIELD							LINKOKIN
J View in Analyze	Area Harvested	17.3 ac	640.8 ac	Speed	4.9 mi/hr	4.8 mi/hr	LINKOKK
0 View in Analyze	Area Harvested Yield	17.3 ac 17.78 bu/ac	640.8 ac 19.71 bu/ac	Speed Productivity	4.9 mi/hr 22.9 ac/hr	4.8 mi/hr 21.9 ac/hr	LINKOKIY
View in Analyze Vecker Farms Ltd. Wecker Farms Ltd							LINKOKN
View in Analyze	Yield	17.78 bu/ac	19.71 bu/ac	Productivity	22.9 ac/hr	21.9 ac/hr	LINKOK

Figure 16. Control Subdivision 14.

Map 😽 Setup 🗸 🚺 Plan 🗸 🚺 Analyze	e v 🚥 More v				Nev		Jeffrey Stegm
2021 Wheat (Hard Red Spring): Harvest Yield				@ Compare		🕞 Share/Expo	
27.68 8% 24.18 12% 24.39 18%					(Flags FLFE 6 pint 1/13/2022
		Keyboard shor	touts Map data 62022 Imag	ery 62022 CNES / Airbus, Maxar Tech	r		Close
18.75 21 % 18.75 Data Analysis A 000gle Summary → Data Analysis A 001 WHEAT (HARD RED SPRING) HARVEST:	WORK TOTALS	Keyboard short		ery 62022 CNES / Airbus, Maxar Tech PERFORMANCE	r		
18.75 21 % Ogle Summary V Data Analysis V 21 WHEAT (HARD RED SPRING) HARVEST: ELD	WORK TOTALS	Keyboard ahor Selected Zone			r		Close
18.75 21 % 18.9% Data Analysis Cogle Summary Data Analysis 21 WHEAT (HARD RED SPRING) HARVEST: ELD	WORK TOTALS Area Harvested		**		nologies Terms of us		Close
18.75 21 % Data Analysis 2 21 WHEAT (HARD RED SPRING) HARVEST: ELD View in Analyze		Selected Zone	Whole Field	PERFORMANCE	nologies Terms of Les Selected Zone	Whole Field	Close
18.75 21 % 18.96 Data Analysis 21 WHEAT (HARD RED SPRING) HARVEST: ELD IView in Analyze scker Farms Ltd. Wecker Farms Ltd	Area Harvested	Selected Zone 16.3 ac	Whole Field 640.8 ac	PERFORMANCE	nologies Terms of It Selected Zone 4.9 mi/hr	Whole Field 4.8 mi/hr	Close
18.75 21 % Ogle Summary V Data Analysis V 21 WHEAT (HARD RED SPRING) HARVEST:	Area Harvested Yield	Selected Zone 16.3 ac 17.53 bu/ac	Whole Field 640.8 ac 19.71 bu/ac	PERFORMANCE Speed Productivity	Selected Zone 4.9 mi/hr 22.8 ac/hr	Whole Field 4.8 mi/hr 21.9 ac/hr	Close

Figure 17. Control Subdivision 15. **Operations** Center JOHN DEERE Jeffrey Stegman 🗸 New ⑦ 🌲 🕵 Wecker Farms Ltd. 🔉 Map 📑 Setup 🗸 🚺 Plan 🗸 Analyze ~ ••• More 2021 Wheat (Hard Red Spring): Harvest Yield (2) Compare ☐ Overlay 🕞 Share/Export 🗙 Connected Tools Flags C . 1 Ð \oplus 89 27.68 FLFE 6 12 % 24.18 Point | 1/13/2022 Θ 18 9 21.39 FLFE 5 < 🞗 e Close Data Analysis M 2021 WHEAT (HARD RED SPRING) HARVEST: WORK TOTALS PERFORMANCE VARIETIES YIELD Selected Zone Whole Field Selected Zone Whole Field EINKORN View in Analyze 640.8 ac Speed Area Harvested 16.3 ac 4.8 mi/hr 4.8 mi/hr Yield 18.2 bu/ac 19.71 bu/ac 22.6 ac/hr 21.9 ac/hr 8 Productivity Wecker Farms Ltd. | Wecker Farms Ltd Total Yield 12,631 bu 296 bu Working Time (?) 43 mins 29 hrs 17 mins Selected Zone Whole Field Moisture 0 % 0.1 % Total Fuel 10.7 gal 448.2 gal Start Aug 13, 2021 8:28 Aug 13, 2021 6:26 Wet Weight 1,092.3 lb/ac 1,182.9 lb/ac Throughput (Dry) 412 bu/hr 431.3 bu/hr

Figure 18. Control Subdivision 16.

JOHN DEERE								Operations Cer Jeffrey Stegma
Map 🐻 Setup 🗸 🗿 Plan 🗸 📊 Analy	vze ~ ••• More ~					lew ?		Wecker Farms Lt
2021 Wheat (Hard Red Spring): Harvest Yield				@ Compar	2 Overla	iy 🕞 sh	are/Export	t 🛛 🗙 Connected Tool
27.68 8% 24.18 12% 21.39 18% 18.75 21% 18.75 18%		Keybard short	corts Mapidas 82022 mage	ny S222 CIES / Arbus, Maxar Teo	nologies Terms of	0 (0 (E Poir	Flags .FE 6 nt 1/13/2022 .FE 5 Close
and the second								VARIETIES
021 WHEAT (HARD RED SPRING) HARVEST:	WORK TOTALS			PERFORMANCE				VARIETIES
IELD	WORK TOTALS	Selected Zone	Whole Field	PERFORMANCE	Selected Zone	e Whole	e Field	EINKORN
D21 WHEAT (HARD RED SPRING) HARVEST: IELD View in Analyze	WORK TOTALS	Selected Zone 16.4 ac	Whole Field 640.8 ac	PERFORMANCE	Selected Zon 4.8 mi/hr	e Whole 4.8 mi		
ELD View in Analyze							/hr	
ELD View in Analyze ecker Farms Ltd. Wecker Farms Ltd	Area Harvested	16.4 ac	640.8 ac	Speed	4.8 mi/hr	4.8 mi 21.9 a	/hr	
IELD	Area Harvested Yield	16.4 ac 16.98 bu/ac	640.8 ac 19.71 bu/ac	Speed Productivity	4.8 mi/hr 22.7 ac/hr	4.8 mi 21.9 a	/hr c/hr 517 mins	

Figure 19. Control Subdivision 17.

JOHN DEERE							Operations Ce
Map 🐻 Setup 🗸 🚺 Plan 🗸 📊 Analyz	e 🗸 🚥 More 🗸				Nev		Wecker Farms Lt
2021 Wheat (Hard Red Spring): Harvest Yield				@ Compar	e 🗘 Overlay	🕞 Share/Expor	t 🛛 🗙 Connected Too
1 0	Lan 223	2280	Margar .	in the			Flags
8%	and the same		WHE F. F.	a chail			
27.68 12 %	Later Line Sar 16		Contraction of the second	the states and			.FE 6
21.39	her strangers	Sand to San		Brown and			nt 1/13/2022
18.75 21 %	the provide					I 😵 💾	.FE 5
ogle Summary - Data Analysis -	Carlos A	A. 196	The state	ST PARA			Close
See Seminary + See mayour -		Keyboard shor	v A	ery ©2022 CNES / Airbus, Maxar Tech	uoloĝies ierms of <mark>kree</mark>		
21 WHEAT (HARD RED SPRING) HARVEST:	WORK TOTALS			PERFORMANCE			VARIETIES
ELD		Selected Zone	Whole Field		Selected Zone	Whole Field	EINKORN
View in Analyze	Area Harvested	16.3 ac	640.8 ac	Speed	4.9 mi/hr	4.8 mi/hr	
	Yield	16.54 bu/ac	19.71 bu/ac	Productivity	22.8 ac/hr	21.9 ac/hr	
	Total Yield	269 bu	12,631 bu	Working Time (?)	42 mins	29 hrs 17 mins	
ecker Farms Ltd. Wecker Farms Ltd					and the second second		
cker Farms Ltd. Wecker Farms Ltd Selected Zone Whole Field	Moisture	0 %	0.1 %	Total Fuel	10.7 gal	448.2 gal	

Figure 20. Control Subdivision 18.

JOHN DEER	E							Operations Cent Jeffrey Stegman
🞗 Map 🥛 Setup 🗸	Plan 🗸 📊 Analyz	ze 🗸 🚥 More 🗸				Nev	. ? .	Wecker Farms Ltd.
🚺 2021 Wheat (Hard Red Sprin) 🕏 Yield	g]: Harvest				(Compare	e 🖸 Overlay	🕞 Share/Expo	ort 🛛 🗙 Connected Tools
27,68 8% 24,18 12%					A CONTRACTOR	(Flags
21.39 18 % 18.75 21 % 18.75 18 % 00 gle Summary -	Data Analysis 🔺		Keyboard ahor		ry-92022 CNES / Airbus, Maxar Tech	r		FLFE 5 Close
21.39 21 % 18.75 21 % 500gle Summary - 2021 WHEAT (HARD RE		WORK TOTALS	Keyboard ahort	touts Map data ©2022 Image	CONTRACTOR OF A DESCRIPTION OF	r	┙║╘╝║	
21.39 18.75 18.96 2021 WHEAT (HARD RE /IELD		WORK TOTALS	Keyboard abort Keyboard abort		ery ©2022 CNES / Airbus, Maxar Tech	r	┙║╘╝║	FLFE 5 Close
21.39 18.75 18.96 00gle Summary ~ 2021 WHEAT (HARD RE /IELD		Area Harvested	Selected Zone 16.5 ac	Whole Field 640.8 ac	PERFORMANCE Speed	nologies Terms of up		Close VARIETIES
21.37 21 % 1.235 21 % 1.235 18 % 00gle Summary → 2021 WHEAT (HARD RE 7ELD 7 View in Analyze	D SPRING) HARVEST:	Area Harvested Yield	Selected Zone 16.5 ac 18.6 bu/ac	Whole Field 640.8 ac 19.71 bu/ac	PF: 02022 CNES / Airbus, Maxar Tech	nologies Terms of U	Whole Field	Close VARIETIES
21.39 21 % 18.75 18 % 00gle Summary ~ 2021 WHEAT (HARD RE/IELD) View in Analyze Wecker Farms Ltd. Wecker	D SPRING) HARVEST:	Area Harvested	Selected Zone 16.5 ac	Whole Field 640.8 ac	PERFORMANCE Speed	selected Zone 4.8 mi/hr	Whole Field 4.8 mi/hr	Close VARIETIES
18.75 21 % 18.75 18 %	D SPRING) HARVEST:	Area Harvested Yield	Selected Zone 16.5 ac 18.6 bu/ac	Whole Field 640.8 ac 19.71 bu/ac	PERFORMANCE Speed Productivity	Selected Zone 4.8 mi/hr 22.5 ac/hr	Whole Field 4.8 mi/hr 21.9 ac/hr	Close VARIETIES

Figure 21. Control Subdivision 19.

JOHN DEERE							Operations Ce Jeffrey Stegma
Map 🐻 Setup 🗸 🚺 Plan 🗸 📊 Analyze 🗸	- ••• More ~				Nev		Wecker Farms Lt
2021 Wheat (Hard Red Spring): Harvest Yield		15	and the second	@ Compar	e Overlay	Share/Exp	ort 🛛 🗙 Connected Too
27.68 8 % 24.18 12 % 21.39 18 %					•		Flags
18.75 21 %		Keyboard short	icuts Map data ©2022 Image	ery ©2022 CNES / Airbus, Maxar Tec			FLFE 5 Close
Data Analysis	WORK TOTALS	Keyboard short		ery 92022 CNES / Arbus Maxar Tec PERFORMANCE		× • •	
Data Analysis A Data Analysis A	WORK TOTALS	Selected Zone				Whole Field	Close
Data Analysis A	WORK TOTALS Area Harvested		**		hnologies Terms of Les		Close
View in Analyze		Selected Zone	Whole Field	PERFORMANCE	hnologies Terms of Use	Whole Field	Close
Uter of the summary Data Analysis Data Analy	Area Harvested	Selected Zone 17.7 ac	Whole Field 640.8 ac	PERFORMANCE	hnologies Terms of ite Selected Zone 4.8 mi/hr	Whole Field 4.8 mi/hr	Close VARIETIES EINKORN
18.00 ▼ Data Analysis ▲ ■ Dogle Summary ▼ Data Analysis ▲ Dolta Analysis ▲ ■ Dolta Analysis ▲ ■ Dolta Analysis ▲ ■ Policity of the second	Area Harvested Yield	Selected Zone 17.7 ac 18.33 bu/ac	Whole Field 640.8 ac 19.71 bu/ac	PERFORMANCE Speed Productivity	Selected Zone 4.8 mi/hr 22.6 ac/hr	Whole Field 4.8 mi/hr 21.9 ac/hr	Close VARIETIES EINKORN

Figure 22. Control Subdivision 20.



Figure 23. Control Subdivision 21. **Operations** Center JOHN DEERE Jeffrey Stegman 🗸 & Map 😽 Setup 🗸 Plan v 📊 Analyze v New ? Wecker Farms Ltd. ••• More 2021 Wheat (Hard Red Sp Spield Overlay Distance Description of the second (Compare Connected Tools Flags a . + Ð 4 Ð 8 9 0 27.68 FLFE 6 12 9 24.18 Point | 1/13/2022 Θ 18 9 21 2 21 9 FLFE 5 .0 e Close Google Data Analysis 🔺 2021 WHEAT (HARD RED SPRING) HARVEST: WORK TOTALS PERFORMANCE VARIETIES YIELD Selected Zone EINKORN Whole Field Selected Zone Whole Field 🙆 View in Analyze 17.5 ac 640.8 ac Area Harvested Speed 4.8 mi/hr 4.8 mi/hr Yield 17.42 bu/ac 19.71 bu/ac Productivity 22.5 ac/hr 21.9 ac/hr Wecker Farms Ltd. | Wecker Farms Ltd Total Yield 304 bu 12,631 bu Working Time ⑦ 46 mins 29 hrs 17 mins Whole Field Selected Zone Moisture 0 % 0.1 % Total Fuel 11.8 gal 448.2 gal Start Aug 13, 2021 8:32 Aug 13, 2021 6:26 Wet Weight 1,045.4 lb/ac 1,182.9 lb/ac Throughput (Dry) 431.3 bu/hr 392.6 bu/hr Figure 24. Control Subdivision 22.

JOHN DEERE							Operations Cer Jeffrey Stegma
Map 🐻 Setup 🗸 🚺 Plan 🗸 📊 Analyz	e 🗸 🚥 More 🗸				Ne	. 🔍	Wecker Farms Lt
2021 Wheat (Hard Red Spring): Harvest Yield				@ Compare	2 Overlay	🕞 Share/Exp	oort 🛛 🗙 Connected Tool
27.68 8 % 24.18 12 %							FLFE 6
21.39 18 % 18.75 21 % 18.75 18 % Dece 18 % Summary ▼ Data Analysis ▲		Keyboard short	toute Map data ©2022 Imag	rery ©2022 CNES / Airbus, Maxar Tech			FLFE 5 Close
21.39 18.75 21 %	WORK TOTALS	Keyboard short		VICTOR OF A CONTRACT OF A CONT			FLFE 5
21.35 21 % 18.75 18 % Ogle Summary Data Analysis 2 Data Analysis 2 Dat	WORK TOTALS	Keyboard abort					FLFE 5
21.35 21 % 18.75 18 % Ogle Summary Data Analysis 2 Data Analysis 2 Dat	WORK TOTALS Area Harvested		**		nologies Terms of U.S.		FLFE 5 Close VARIETIES
View in Analyze		Selected Zone	Whole Field	PERFORMANCE	nologies Terms of Las	Whole Field	FLFE 5 Close VARIETIES
21 % 21 % 18.75 18 % Ogle Summary + Data Analysis + Data Analysis + Difference View in Analyze ecker Farms Ltd. Wecker Farms Ltd	Area Harvested	Selected Zone 16.4 ac	Whole Field 640.8 ac	PERFORMANCE	nologies Terms of Les Selected Zone 4.9 mi/hr	Whole Field 4.8 mi/hr	FLFE 5 Close VARIETIES EINKORN
21.875 21 % 18.75 18 % bogle Summary - Data Analysis -	Area Harvested Yield	Selected Zone 16.4 ac 18.9 bu/ac	Whole Field 640.8 ac 19.71 bu/ac	PERFORMANCE Speed Productivity	Selected Zone 4.9 mi/hr 22.5 ac/hr	Whole Field 4.8 mi/hr 21.9 ac/hr	FLFE 5 Close VARIETIES EINKORN

Figure 25. Control Subdivision 23.

							Operations Center Jeffrey Stegman ~
& Map 🐻 Setup 🗸 🚺 Plan 🗸 📊 Analyze	e 🗸 🚥 More 🗸				Nev	0 1	🕻 Wecker Farms Ltd. ~
 3 2021 Wheat (Hard Red Spring): Harvest ♦ Yield 				@ Compar	e Overlay	🕞 Share/Export	X Connected Tools ~
27.68 8% 24.18 12% 21.39 18% 18% 300gle Summary Data Analysis		Keybard abor	Courte	ary 2022 CHES / Arbor Moren Tet			1/13/2022
2021 WHEAT (HARD RED SPRING) HARVEST:	WORK TOTALS			PERFORMANCE			VARIETIES
YIELD View in Analyze		Selected Zone	Whole Field		Selected Zone	Whole Field	EINKORN
	Area Harvested	16.1 ac	640.8 ac	Speed	4.8 mi/hr	4.8 mi/hr	
8	Yield	19.26 bu/ac	19.71 bu/ac	Productivity	22.2 ac/hr	21.9 ac/hr	
8 Wecker Farms Ltd. Wecker Farms Ltd	Total Yield	311 bu	12,631 bu	Working Time (?)	43 mins	29 hrs 17 mins	
8 Wecker Farms Ltd. Wecker Farms Ltd Selected Zone Whole Field Start Aug 13, 2021 7:10 Aug 13, 2021 6:26							

Figure 26. Control Subdivision 24. Operations Center JOHN DEERE Jeffrey Stegman 🗸 New ⑦ 🌲 🕵 Wecker Farms Ltd. & Map 5 Setup 🗸 🚺 Plan 🗸 ••• More Analyze ~ 2021 Wheat (Hard Red Spring): Ha Yield Overlay 6 Flags 1 . • 89 0 \oplus 27.68 FLFE 6 24.18 Point | 1/13/2022 Θ 21 30 FLFE 5 2 18 9 Close Data Analysis 🔺 2021 WHEAT (HARD RED SPRING) HARVEST: YIELD WORK TOTALS PERFORMANCE VARIETIES Selected Zone Whole Field Selected Zone Whole Field EINKORN 😡 View in Analyze 16.6 ac 640.8 ac Area Harvested Speed 4.8 mi/hr 4.8 mi/hr 8 Yield 19.77 bu/ad 19.71 bu/ac Productivity 22.3 ac/hr 21.9 ac/hr Wecker Farms Ltd. | Wecker Farms Ltd Total Yield 327 bu 12,631 bu Working Time ⑦ 44 mins 29 hrs 17 mins Selected Zone Whole Field Moisture 0.1 % 0.1 % Total Fuel 11.3 gal 448.2 gal Start Aug 13, 2021 7:10 Aug 13, 2021 6:26 Wet Weight 1,186.2 lb/ac 1,182.9 lb/ac Throughput (Dry) 441.6 bu/hr 431.3 bu/hr

Figure 27. Control Subdivision 25.

JOHN DEERE							Operations Cer Jeffrey Stegma
🕻 Map 😽 Setup 🗸 🗿 Pla	lan 🗸 📲 Analyze 🗸	••• More ~			New		Wecker Farms Lto
1) 2021 Wheat (Hard Red Spring): Harve 🕏 Yield	est 🗸			@ Compare	Overlay	🕞 Share/Expo	ort 🔀 Connected Tool:
27.68 8% 24.18 12% 21.39 18% 18.75 21%							FLFE 6 pint 1/13/2022 FLFE 5
18 %	a Analysis 🔺	Keybo	ard shortcuts Map data \$2022 Imagery				Close
oogle Summary - Data	11	Keybo	ard shortcuts Map data ©2022 Imagery I				Close
000 18% 000 Summary V Data 021 WHEAT (HARD RED SPRI 1ELD	ING) HARVEST: WO	DRK TOTALS Selected Zo	ard shortcuts Map data \$2022 Imagery	©2022 CNES / Airbus, Maxar Techr	ologies Terms of Use	Whole Field	
13 % oogle Summary V Data 021 WHEAT (HARD RED SPRI 1ELD View in Analyze	ING) HARVEST: WO	DRK TOTALS Selected Zo ra Harvested 15.8 ac	ard shortcurs Map data @2022 Imagery ** one Whole Field 640.8 ac	DERFORMANCE Speed	Selected Zone 4.9 mi/hr	Whole Field 4.8 mi/hr	VARIETIES
18 % * Dogle Summary * Data 021 WHEAT (HARD RED SPRI IELD View in Analyze	ING) HARVEST: WC	DRK TOTALS Selected Zo ra Harvested 15.8 ac Id 17.98 bu/a	erd shortcuts Map ders 62022 (magery	PERFORMANCE Speed Productivity	selected Zone 4.9 mi/hr 20.6 ac/hr	Whole Field 4.8 mi/hr 21.9 ac/hr	VARIETIES
18 % Dogle Summary O21 WHEAT (HARD RED SPRI IELD View in Analyze Vecker Farms Ltd. Wecker Farms	ING) HARVEST: WC Are Is Ltd Tot	CRK TOTALS Selected Zr a Harvested 15.8 ac Id 17.98 bu/a ial Yield 284 bu	ard abottoss Mag date 82022 (magery T A one Whole Field 640.8 ac c 19.71 bu/ac 12.631 bu	PERFORMANCE Speed Productivity Working Time ()	selected Zone 4.9 mi/hr 20.6 ac/hr 45 mins	Whole Field 4.8 mi/hr 21.9 ac/hr 29 hrs 17 mins	VARIETIES
13.66 ✓ oogle Summary ✓ Data 2021 WHEAT (HARD RED SPRI 71ELD View in Analyze Yecker Farms Ltd. Wecker Farms Selected Zone Who	ING) HARVEST: WO Are is Ltd Tot ole Field Mo	DRK TOTALS Selected Zo ra Harvested 15.8 ac Id 17.98 bu/a	erd abottosta Map des 62022 (magery VA one Whole Field 640.8 ac c 19.71 bu/ac 12.631 bu 0.1 %	PERFORMANCE Speed Productivity	selected Zone 4.9 mi/hr 20.6 ac/hr	Whole Field 4.8 mi/hr 21.9 ac/hr	VARIETIES

Figure 28. Control Subdivision 26.