3535 Plymouth Blvd. , • Suite 210 • Minneapolis, MN 55447 • Phone: (763) 550-9000 • Fax: (763) 550-9109 Web Address: www.quazarcapital.com E-mail: quazar-info@quazarcapital.com

Quazar Report – Agriculture: Smart Farming

Q3 2019

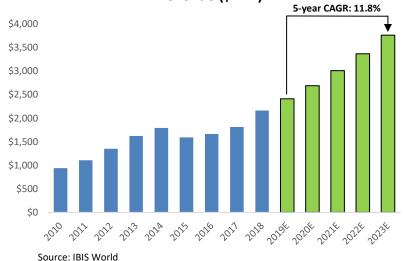
Estimated Read Time: 3 minutes

Executive Summary

Smart Farming refers to the integration of data analytics by way of the Internet of Things (IoT). Allowing physical devices and objects to send and receive data has transformed the way farmers harvest, manage livestock, administer pesticides & fertilizer, and measure soil nutrition. Sensors, GPS, robotics, and artificial intelligence all contribute to the fastest growing segment of agriculture. Bringing advanced technologies into a mature industry has led to rapid growth for companies willing to invest in technologies that will benefit them and consumers.

A large number of businesses have initiated programs looking to achieve better farming practices to reduce carbon emissions and pollution. The use of these technologies allows for lower water consumption and farm runoff but still increases crop yields by an average of 7-15%¹. GPS seed tracking and drones allow farmers to improve nitrogen fertilizer use efficiency, (less than ½ of all fertilizer used is absorbed by plants²), saving both the environment and farmers' pocketbooks. Agribusiness will continue to benefit from data collection, allowing companies to face the growing challenges in production and sustainability.

Precision Agriculture System & Services Revenue (\$mm)



- 1. Burwood-Taylor, L. (2017). Arable Raises \$4.25m Series A from S2G and Middleland
- 2. Sharma, L. (2017). A Review of Methods to Improve Nitrogen Use Efficiency in Agriculture
- 3. United Nations World Population Prospects. (2019). Total Population Medium Fertility
 Variant for Year 2050
- 4. Hunter, M. (2017). Agriculture in 2050: Recalibrating Targets for Sustainable Intensification
- 5. Davis, K. (2017). Meeting Future Food Demand with Current Agricultural Resources
- 6. United States Department of Agriculture. (2019). Electric Loan Program
- 7. Postscapes. (2014). 11 Questions with Lance Donny the Founder and CEO of OnFarm

Key Trends/Highlights

- World Population in 2050: 9.7 billion³
 - ✓ From 2014-2050 food production will have to increase by 70%⁴
 - ✓ Cutting food waste in half from 24% to 12% would feed 1 billion people⁵
- Companies like SemiosBio Technologies, headquartered in Vancouver, Canada, have created a wireless network of devices for growers of fruit trees that allow growers to monitor weather and implement pest and water management.
- The USDA has committed \$181 million for rural electric infrastructure, which is just a fraction of the overall \$858 million committed through the USDA's Electric Loan Program. Recipients like Lake Country Power have received \$17 million designated specifically for smart grid technologies.⁶
- "It (data analytics) can create a 15 percent water savings, so in that area, it means 50 billion gallons saved annually. That's enough water to supply the top 10 cities in the state of Georgia for the entire year." Lance Donny Former CEO of OnFarm Systems Inc.

Quazar Contacts

Bruce Behm

President

Bruceb@quazarcapital.com

Nicole Behm-Koep

Director of Operations
Nicoleb@quazarcapital.com

Tom Hansen

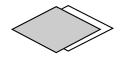
Senior Analyst

Tomh@quazarcapital.com

Clay Bergevain

Analyst

Clayb@quazarcapital.com



Quazar Capital Corporation

3535 Plymouth Blvd. , • Suite 210 • Minneapolis, MN 55447 • Phone: (763) 550-9000 • Fax: (763) 550-9109 Web Address: www.quazarcapital.com

Selected Transaction: Quazar Capital Corporation Advises Pepin Heights Orchard, Inc. in its Sale



MINNEAPOLIS, MINNESOTA: Quazar Capital Corporation is pleased to announce that Pepin Heights Orchards, Inc. ("Pepin Heights") has been acquired by a Midwest Based Agricultural Company. Quazar Capital Corporation ("Quazar") advised Pepin Heights in the transaction.

THE TRANSACTION: The primary Shareholder of Pepin Heights made a strategic decision to find a partner who would continue to build upon the strong Pepin Heights brand and tradition. They chose Quazar as their M&A Adviser primarily due to Quazar's industry experience, extensive network, and reputation for successfully working with privately held businesses.

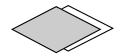
Quazar was able to generate interest from numerous strategic buyers, internationally and nationally. The Shareholders ultimately decided that a local grower with extensive industry experience would be the best fit to continue to grow the business and expand the Pepin Heights brand.

"I'm thankful for Quazar's involvement; they did exactly what they said they would do. They generated interest, kept the deal moving, and ultimately got the deal done. I look forward to spending less time in the business and more time traveling with my family." – Dennis Courtier, former CEO of Pepin Heights

THE SELLER: Pepin Heights Orchards, Inc. (pepinheights.com) is a vertically integrated, premium apple grower, packer, marketer, broker, processor, and farm market retailer. The business is located in Lake City, Minnesota.

About Quazar Capital Corporation

Quazar Capital Corporation (quazarcapital.com) is a Minnesota based Investment Banking Firm with nearly 30 years of experience confidentially helping privately held companies with Mergers & Acquisitions, Recapitalizations, and Financial Advisory Services. Quazar specializes in transitioning companies with EBITDA of \$2 - \$10 million.



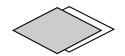
Quazar Capital Corporation

3535 Plymouth Blvd. , • Suite 210 • Minneapolis, MN 55447 • Phone: (763) 550-9000 • Fax: (763) 550-9109 Web Address: www.quazarcapital.com E-mail: quazar-info@quazarcapital.com

Selected Transactions: Recent Industry M&A Activity

		<u>Total</u>	
0		Transaction	
Announced Date	Target/Issuer	<u>Value</u> (\$USDmm)	Buyers/Investors
06/2019	Spring Oaks Greenhouses, Inc.	\$49.9	Green Growth Brands Inc.
00/2013	Spring data diceimouses, inc.	345.5	(CNSX:GGB)
04/2019	MGI Grain Processing, LLC	\$4.0	RiceBran Technologies
			(NasdaqCM:RIBT)
02/2019	Proscere Bioscience Inc.	\$3.0	Simlatus Corporation
02/2019	Actagro, LLC	\$340.0	Nutrien Ltd. (TSX:NTR)
01/2019	Appeeling Fruit, Inc.	\$2.0	Peterson Farms, Inc.
11/2018	National Concessions Group, Inc.	\$81.9	SLANG Worldwide Inc. (CNSX:SLNG)
11/2018	ENP Investments LLC	\$5.1	NanoChem Solutions Inc.
11/2018	San Felasco Nurseries, Inc.	\$69.7	Harvest FINCO, Inc.
10/2018	EZ-CLONE Enterprises Inc.	\$2.0	GrowLife, Inc. (OTCPK:PHOT)
10/2018	Cannabis Cultivation Business of Puration,	\$1.2	Nouveau Life Pharmaceuticals, Inc.
09/2018	Inc. TyraTech, Inc.	\$4.4	(OTCPK:NOUV) American Vanguard Corporation
03/2018	Tyrarecti, inc.	74.4	(NYSE:AVD)
09/2018	Substantially All of the Assets of	\$26.5	S&W Seed Company
	Chromatin, Inc.		(NasdaqCM:SANW)
07/2018	Nature's Organic Grist, LLC	\$2.8	Riverland Ag Corp.
05/2018	All Assets of LCG Business Enterprises, LLC	\$5.0	Players Network, Inc. (OTCPK:PNTV)
05/2018	Farmtiva, LLC	\$1.5	Isodiol International Inc. (CNSX:ISOL)
04/2018	FloraCal Farms	\$27.6	Origin House (CNSX:OH)
03/2018	Bell Nursery Holdings, LLC	\$72.0	Central Garden & Pet Company (NasdaqGS:CENT)
03/2018	Oro Agri SEZC Limited	\$94.0	Omnia Group (Pty) Ltd
01/2018	All Assets of GrowHealthy Holdings, LLC	\$48.7	iAnthus Capital Holdings, Inc. (CNSX:IAN)
01/2018	The Agronomy Group LLC	\$4.8	Vegalab, Inc. (OTCPK:VEGL)
12/2017	Organic Almond Orchard in California	\$5.9	Gladstone Land Corporation (NasdagGM:LAND)
11/2017	Nu-West Industries, Inc. And Nu-West Mining, Inc.	\$100.0	Itafos (TSXV:IFOS)
11/2017	FMC Corporation, European Herbicide		Nufarm Limited (ASX:NUF)
	Portfolio	\$90.0	

Source: Capital IQ



Quazar Capital Corporation

3535 Plymouth Blvd. , • Suite 210 • Minneapolis, MN 55447 • Phone: (763) 550-9000 • Fax: (763) 550-9109 Web Address: www.quazarcapital.com E-mail: quazar-info@quazarcapital.com

Selected Transactions: Recent Industry M&A Activity (Without Disclosed Value)

Announced			
Date	Target/Issuer	Buyers/Investors	
07/2019	B&W Quality Growers, LLC	Blue Road Management, L.P.	
06/2019	Verity Corp.	Healthcare Solutions Management Group Inc (OTCPK:VRTY)	
06/2019	FloWater Irrigation	Munro Companies, Inc.	
06/2019	BelleHarvest Sales Inc.	Michigan Fresh Marketing LLC	
05/2019	Assets of The Hydroseeding Company LLC	Erosion Control Products Corporation	
05/2019	Buckeye Resources, Inc.	Oldcastle APG, Inc.	
05/2019	Crown Equipment, Inc.	Beauregard Equipment, Inc.	
04/2019	420 Distribution, LLC/Coachella Distillation, LLC	CP Logistics, LLC	
04/2019	Wayne Bailey, Inc.	Jackson Farming Company, LLC	
03/2019	New Organic Fertilizer Production Facility in California	Darling Ingredients Inc. (NYSE:DAR)	
03/2019	Midas Nursery Solutions, Inc	TreeSap Farms, LLC	
03/2019	Assets of Schillinger Genetics	Benson Hill Biosystems, Inc.	
03/2019	New Horizon Farms, LLC	Summit Harbor Holdings Inc.	
03/2019	Miller Chemical & Fertilizer Corp.	Huber Engineered Materials	
03/2019	Ag Systems, Inc.	Heartland Ag, Inc.	
02/2019	Grain Facility at Northgate, North Dakota of General Mills, Inc.	Viterra USA LLC	
02/2019	Superjacent Studio of JERDE	The Jerde Partnership, Inc	
02/2019	Clearfield Canola Production System of BASF	Corteva, Inc. (NYSE:CTVA)	
02/2019	Benchmark Landscapes, LLC	BrightView Holdings, Inc. (NYSE:BV)	
01/2019	Vegetable Business of Growers Express, LLC	Church Brothers, LLC	
01/2019	Integrity Tree Service, Inc.	Nature's Trees, Inc.	
01/2019	Big Red Orchard	Epicurean Group	
01/2019	US Irrigation, LLC	Laurel Ag	
01/2019	Edible Bean Processing Plant of ILTA Grain Inc	Hensall District Co-Operative, Incorporated	

Source: Capital IQ