



Quarterly Newsletter

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Summer 2020

An Optimistic Turn on how COVID-19 has Impacted the Dairy Industry

Izabella Toledo

The dairy market outlook for 2020 has greatly improved from how it first appeared during March's collapse due the COVID-19 crisis. The dramatic drop in dairy prices in April has been followed by a sturdy recovery in market prices in May and June. Currently, it looks like there is going to be a very strong rebound and prices will get to a "normal level" during the second semester of 2020. By the middle of June, dairy future outlook indicated that the projected average milk price for the entire second half of 2020 is expected to be around \$18.60 per cwt, which is very similar to the average milk price for all of 2019. This quick dairy market rebound has been caused by adjustments that have reduced milk supply along with increases in dairy product demand. In order to adapt, dairy farmers have rapidly changed their management, milking and feeding practices. In addition, government purchases of dairy products expanded substantially while federal government provided significant emergency relief help to the Department of Agriculture. Florida dairy farmers have received \$4.1 million as part of the Coronavirus Food Assistance Program (CFAP) alone. The CFAP assistance, can be seen as a supplement to milk prices during April and May and combined with average DMC payments, equates to about \$18.60 per cwt for those two months.

As states across the U.S are re-opening for business, increasing numbers of food service establishments have resumed dairy products

purchases to refill empty stocks. Interestingly, as consumers spent more time at home throughout the pandemic, retail sales of dairy products have increased and are well above of what we have seen before the COVID-19 crisis. It appears that the coronavirus pandemic has affected consumer eating habits (see figures). During years, milk sales were down while sales of plant-based beverages were increasing. Currently, milk outsells plantbased beverage by a margin of more than 10 to 1. So far, this increase in milk sales is persisting, despite the fact that 2020 began as another year of a slow decline in milk sales and increases in plantbased beverages sales. During the pandemic peak weeks in March, consumers bought an extra 7.9 million of plant-based beverages compared to the same period last year, while milk sales increased by more than 45 million gallons during the same period. The great turnaround caused by dramatic increases in milk sales has helped keep dairy farms in business during the time when most food services were closed and before any federal disaster assistance arrived.

Even though future retail trends cannot be predicted, dairy has remained strong throughout all the disruption that the crisis has brought. The continuous spread of the coronavirus and how farmers will rapidly increase production once things go back to "normal" are important questions that will determine how the dairy industry will further recover from this crisis.

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Source: NMPF

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https://animal.ifas.ufl.edu/dairy/uf-dairyupdate-L/

New UF Institute to Address Food Production and Sustainability at a Global Scale

The University of Florida has announced the creation of the UF/IFAS Food Systems Institute, which will bring together the university's top researchers to find solutions to feeding the world in a way that is economically and environmentally sustainable.

"This institute brings together global engagement with what we call systems thinking – addressing world hunger by researching how every part of the field-to-fork process affects every other part. It's a search for how to deliver the most abundant, nutritious and affordable food possible for the greatest number of people," said Jack Payne, who retired on July 12 as the UF senior vice president for agriculture and natural resources and leader of UF/IFAS.

Payne led UF/IFAS for 10 years, during which he established the Institute for Sustainable Food Systems (ISFS) and helped develop the USAIDfunded Feed the Future Innovation Lab for Livestock Systems (LSIL). The new Food Systems Institute will combine these two initiatives, including faculty and projects associated with each.



The new Food Systems Institute will be led by Adegbola Adesogan, professor of ruminant nutrition in the Department of Animal Sciences and current director of the Feed the Future Innovation Lab for Livestock Systems.

Source: http://blogs.ifas.ufl.edu/news/2020/07/10/foodsystems-institute/

Death of L.E. "Red" Larson

Mr. Louis Ellwood "Red" Larson passed away on July 17, 2020 at the age of 96. Red Larson was one of the pioneers of the Florida dairy industry. He was a statewide and national leader.

Mr. Larson helped build the dairy science program at the University of Florida in many ways. He was instrumental in the founding of the Milk Checkoff Program which continues to support dairy Extension, research, and youth programs in Florida and beyond. His dairy farms have been used as sites for many research projects conducted by faculty and graduate students. He also served on the UF President's Council.

In 2016, Mr. Larson was presented with the Distinguished Achievement Award by the University of Florida. The award is one of the highest honors bestowed upon a UF supporter. It recognizes exceptional achievements of the individual in his or her chosen profession, demonstrated leadership, and other exemplary accomplishments that merit special recognition by the university.



Mr. L. E. "Red" Larson received the UF Distinguished Achievement Award in 2016.

Red Larson's longtime leadership in Florida's dairy industry was recognized by his four children in 2005, when they established three endowments at UF's Institute of Food and Agricultural Sciences (IFAS). The endowments enhance teaching, research and Extension programs in dairy science and the 4-H Youth Development Program at UF.

In recognition of the contributions of the Larson family to the University, UF renamed UF's dairy science building as the L.E. "Red" Larson Dairy Science Building in 2012.



The L.E. "Red" Larson Dairy Science building of the Department of Animal Sciences in Gainesville.



The Larson family with the L. E. "Red" Larson Dairy Science Building in 2012.

Mr. Larson's accomplishments and awards were many. The obituary is found at: <u>https://www.okeechobeefuneralhome.com/obitua</u> ries/Louis-Red-Larson/

The faculty, staff and students of the Department of Animal Sciences express their condolences to the Larson family and are grateful for the many years of support.

UF Dairy Unit Facilities Update

Albert De Vries

The UF Dairy Unit continues to make improvements in its facilities and practices. One noticeable change is the renovation of two pens with a total of 180 stalls. Free stall loops in several pens were in bad shape and many were broken. Stalls were difficult to keep clean and cows had difficulty using the stalls.

Manager Eric Williams found slightly used, but as good a new, stall loops that were affordable and a good fit for the Dairy Unit. The Dairy Unit staff installed the free stall loops in May and June when the coronavirus pandemic had shut down much of the research activities.

The Dairy Unit has been milking approximately 400 cows since August 2019, which means some space is available in the barns to move groups of cows around and get the renovations done.

Earlier this year, the Dairy Unit also started to use recycled sand for bedding. Earlier, clean new sand was purchased and used. Sand had been used for many years to bed stalls. Much had been dumped around the farm over the years so that it could be mined. Testing revealed that the old sand had low bacteria loads and could be used again in the stalls. The sand recycling programs is expected to save us up to \$100,000 annually in sand purchase costs.

Another wish was fulfilled when dry cows and springing heifers were brought inside the facilities from the pastures around the farm. UF research led by Geoff Dahl showed that heat stressed pregnant dry cows produce less milk after calving and their offspring are less productive too. Our economic analyses revealed that cooling dry cows makes a lot of sense. With the space in the facilities and the upgrades of the pens already available, it was time to bring in these animals and protect them better from the Florida heat.

The wish list is still long but we are encouraged by the progress that is being made.



Cows in upgraded stalls at the UF Dairy Unit. The sand in the stalls is now recycled sand.



Upgraded stalls in the first lactation pen. The Dairy Unit staff is experimenting with a mister system to better cool the air near the stalls.



Dry cows are no longer housed outside on pasture. This photo was taken shortly before the dry cows were moved inside.



Several Department of Animal Sciences faculty members who work with dairy cattle received awards this summer.

Through the American Dairy Science Association, Antonio Faciola is the 2020 recipient of the Cargill Animal Nutrition Young Scientist Award, generously sponsored by Cargill Animal Nutrition. Adegbola Adesogan is a 2020 recipients of the Journal of Dairy Science Highly Cited Award. Pete Hansen was awarded the ADSA Southern Section Honor Award. This award recognizes his many scientific achievements, but more importantly recognizes his commitment to dairy production in the Southeast.

Geoff Dahl received the 2020 Animal Physiology and Endocrinology Award through the American Society of Animal Science.



Antonio Faciola



Adegbola Adesogan



Pete Hansen



Geoff Dahl

Albert De Vries

It can be useful to compare the performance of your herd with peers. This type of benchmarking may help point to areas where improvements are needed and are possible. At the minimum, benchmarking should be a motivator to see where we can improve.

One set of performance data from other dairy farms I have access to is DHI data. Table 1 has a list of selected performance items from herds in Florida, Georgia, New York, and Michigan that participate in the DHI milk recording program. The data are from DairyMetrics from DRMS in Raleigh, NC (https://www.drms.org). I applied a little bit of filtering to the data: all herds had at least 100 cows and a pregnancy rate of at least 10%. New York and Michigan were added because they are prominent dairy states with many herds in the DRMS database.

The DairyMetrics system produces averages, minimums, maximums, and standard deviations per item, as well as the number of herds that contribute data to that item. Only the number of herds and the averages are shown in the table. The averages are not weighted, that means that every herd has the same influence on the results, independent of the number of cows in that herd.

We should expect that half of the herds do better and half of the herds do worse than the averages in the table. That is a statistical law based on the distribution of such data. It is not correct to conclude, therefore, that if we are above average we are good and if we are below average we have a problem. Half of us are going to be below average, no matter how good we collectively are. Half of us are going to be above average, no matter how poor we collectively are.

We also need to be aware of the representativeness of these data. The percentage of cows in the DHI data set compared to the number of cows in the state varies from 16% (Georgia) to 40% (New York). Are these herds a good sample of the herds in the state? It is hard to tell. Nationally, almost half of the dairy cows are enrolled in the DHI program according to the Council on Dairy Cattle Breeding (CDCB). The CDCB publishes some results as National Performance Metrics found on <u>https://queries.uscdcb.com/publish/dhi.cfm</u>

The results in Table 1 are self-explanatory. Most of the performance items for Florida are comparable with those for Georgia. New York and Michigan generally show better results, but not everywhere.

For historical comparison, a set of Florida DHI results from 1993 to 2012 are summarized here: <u>https://edis.ifas.ufl.edu/an286</u>

For more information, contact Albert De Vries, <u>devries@ufl.edu</u>

Table 1. Average results for herds participating in the DHI program and located in Florida, Georgia, New York, or Michigan. Source: DairyMetrics, DRMS, Raleigh, NC

	Florida		Georgia		New York		Michigan	
Item	#Herds	Average	#Herds	Average	#Herds	Average	#Herds	Average
Dairy cows in the state*		116,000		82,000		627,000		426,000
Dairy cows in this DHI data set**		27,125		13,210		251,611		153,663
% Dairy cows in this DHI data set (%)		23		16		40		36
Number of Cows-All Lact	17	1,596	25	528	404	623	262	587
Cows Left Herd-All Lact (%)	17	34.2	25	42.3	400	37.8	261	38.1
Rolling Milk (lbs/cow/year)	17	21,721	25	22,106	400	24,581	262	25,920
Rolling Fat (lbs/cow/year)	14	789	22	865	397	969	259	995
Rolling Protein (lbs/cow/year)	14	662	22	692	397	762	259	801
Peak Milk 1st Lact (lbs/cow/day)	16	77.9	25	74.9	404	81.1	262	85.2
Peak Milk 2nd Lact (lbs/cow/day)	17	94.1	25	94.3	404	103	262	107.8
Peak Milk 3rd+ Lact (lbs/cow/day)	17	101.5	25	101.0	404	110.4	262	117.0
Standardized 150-d Milk (lbs/cow/day)	17	76.7	25	77.2	403	83.1	262	87.6
SCC Actual (cells/ml)	11	291,200	21	263,200	378	196,400	243	164,600
Pregnancy Rate-Year Ave (%)	17	18.5	25	17.1	404	24.0	262	24.0
Con Rate for Past 12M-1st Serv (%)	17	47.3	25	48.2	404	40.8	262	44.1
Con Rate for Past 12M-2nd Serv (%)	17	48.0	25	46.1	404	41.0	262	43.7
Con Rate for Past 12M-3rd+ Serv (%)	17	41.9	25	33.3	404	39.0	262	40.1
Heats Observed for Year (%)	15	52.7	23	41.2	404	58.1	258	55.2
Net Merit \$ for All Cows	16	-24.7	22	-10.8	400	27.7	258	14.9
Replacements (#heifers/#cows)*100	17	62	25	79	404	88	262	94

*USDA, National Agricultural Statistics Service (NASS); and USDA, Economic Research Service calculations.

**Filtering: only herds with \geq 100 cows and \geq 10% pregnancy rate (year-average).

Results per July 19, 2020

ARS Animal Health National Program Assessment and Priorities Survey

The USDA Agricultural Research Service (ARS) is starting a 5 years research planning cycle and wants to hear from you through a survey. This survey is a tool for the program people to determine research priorities related to animal health. Results from earlier surveys also have been used by USDA-NIFA AFRI to set research priorities for funding. AFRI (Agriculture and Food Research Initiative) is the nation's leading competitive grants program for agricultural sciences. UF's funding for animal and dairy science research is primarily driven by competitive AFRI grants awarded to faculty. Dairy is often underrepresented in these surveys. Dairy stakeholders are asked to complete the survey:

https://www.surveymonkey.com/r/CZQ2TZH

Hurricane Preparation and Recovery Guides for Florida Dairy Producers

USDA Climate Hubs have made available hurricane preparation and recovery guides for Florida producers, including dairy. The Dairy guide has been prepared by Dr. John K. Bernard, Ph.D., P.A.S., Dipl. ACAN, Professor, Department of Animal and Dairy Science University of Georgia, Tifton, GA 31793. <u>jbernard@uga.edu</u>. Find the Florida Dairy guide at:

https://www.climatehubs.usda.gov/hubs/southeast/hu rricane-preparedness-and-recovery-guides-floridaproducers

UF IFAS Dairy Unit 70 Years Old

Albert De Vries

July 2020 marks the 70th anniversary of the dedication of the UF Dairy (Research) Unit in Hague, Florida. The herd, then consisting of Jerseys

and Guernseys, was moved from the central campus in Gainesville to a newly constructed facility located 12 miles north on September 15-16, 1949. On July 20-21, 1950, a dedication of the new Dairy Unit took place in conjunction with the annual Dairy Field Day Meeting held in those years.



Florida Agricultural Experiment Station dairy barn in Hague. May 1952.



Milking cows at the UF Dairy Research Unit in 1960



Florida Dairy News, the magazine of the Florida Dairy Industry Association during those years, reported on the dedication in their November 1950 issue. Those two pages are reprinted on the next two pages in this

newsletter. Source: https://ufdc.ufl.edu/UF00082035/00001/5x



Directors of the Florida Dairy Industry Association initiate Dr. J. Hillis Miller, president of the University of Florida, into the "Order of Bell Cows." Left to right: Wilmer Bassett, Jr., Sid Lenfestey, Henry Schneider, Frank Doub, T. G. Lee, Vernon Graves, Dr. E. L. Fouts, Theo Datson, S. H. Solomon, and E. T. Lay. Dr. Miller is seated at right, W. F. Powers, center and G. J. White, Jr., seated at left. The event took place during Florida's annual Field Day Meeting.

University of Florida's Dairy Research Farm Is Dedicated as Feature of Field Day Program

THE FLORDA Dairy Industry Association and the University of Florida Dairy Department, with the assistance of the Association's Allied Trades "Alligator Club Members," the Florida Feed Dealers Association and the Florida Retail Farm Equipment Dealers Association, teamed up on July 20-21 to put on Florida's Fifteenth Annual Dairy Field Day Meeting at the University of Florida in Gainesville.

In addition to two half-day general conference sessions, filled with valuable lectures and demonstrations on "Feeding Dairy Cattle" by key staff members of the University's Dairy Department, there was the annual Field Day Dinner meeting with both its food, fun and entertain-



University of Florida President 7. Hillis Miller opens the dedication program for the new dairy unit at Hague, Florida. Left to right: Vernon Graves, president of the Florida Dairy Industry Association; Sam Solomon; Hollis Rinehart, Eli Fink; Thaxton Springfield; Dr. Miller; W. F. Powers; Dr. J. Wayne Reitz; Nathan Mayo, Commissioner of Agriculture, and N. B. Jordan.

ment and its serious moments as the group listened intensely to Director Bill Fifield of the Florida Agricultural Experiment Station and Dr. Wayne Reitz, Provost of the College of Agriculture.

Various national and state honor awards for outstanding achievements in dairying were presented at this dinner meeting.

This year's regular Field Day Program was supplemented by two other features which the delegates found most interesting: One of these was the splendid display of dairy farm equipment which was provided through the courtesy of the Florida Retail Farm Equipment Association. The other, which highlighted and concluded the two day annual event, was a special outdoor program dedicating the new University of Florida Dairy Research Farm, 12 miles north of Gainesville. This ceremony, held in the beautiful pine grove adjacent to the new Dairy Unit buildings, was participated in by most of the top officials of the University of Florida and the State Department of Agriculture, in addition to the impressive delegation of the state's leading dairymen.

Among those present and participating were the president of the University of Florida, members of the State Board of Control, the Commissioner of Agriculture, and his chief dairy supervisor, officials of the Florida Milk Commission, the Florida Veterinary Medical Association, the Florida Agricultural Experiment Station, the Florida Agricultural Extension Service, and staff members of the Dairy Department and the College of Agriculture of



Walter Welkener, Holly Hill Dairy, Jacksonville, receives a plaque as state winner of the 1949 Dairy Herd Improvement Association contest from W. J. Harmon, Southern Dairies, as Extension Dairyman C. W. Reaves looks on.

the University.

Dr. J. Hillis Miller, president of the University; N. B. Jordan, member of the State Board of Control, and Theo Datson, vice president of the Florida Dairy Industry Association, made the dedication address.

In connection with the Dairy Farm Unit dedication program, the Florida Dairy Industry Association and the University of Florida joined in honoring John M. Scott, chief dairy supervisor of the State Department of Agriculture and former member of the staff of the College of Agriculture.

H. G. Clayton, director of Florida Agricultural Extension Service, presented the University Dairy Department with a portrait of Mr. Scott; Vernon Graves, president of the Florida Dairy Industry Association, presented him with a resolution and a plaque on behalf of the Florida Dairy Industry and Nathan Mayo, Commissioner of Agriculture, eulogized Mr. Scott's 35 years of outstanding service to Florida agriculture and the Florida dairy industry.

The program was concluded by an impressive ceremony in which the associations Executive Secretary, Andy Lay, pinch-hitting for the Chairman of the organization's University of Florida Committee, Alf Nielsen, and assisted by the Board of Directors, initiated President Miller of the University of Florida into the dairy industry's new honor society known as the "Order of Florida Bell Cows," of which Mr. Nielsen is also President. Dr. Miller, who became the eighth member of the "Bell Cows," was appropriately decorated with the "Cow Bell" emblem of the society, a white felt cowboy hat and a neckerchief.



E. T. "Andy" Lay (standing), Secretary of the Florida Dairy Industry Association, and Sid Lenfestey, chairman of the Allied Trades Members Entertainment Committee, during the annual Dairy Field Day banquet in the University of Florida cafeteria.

Other "Bell Cows" are: Sam Solomon, Sr., Quincy, Ernest R. Graham, Miami, John G. DuPuis, Jr., Miami, Cotton Paul, Jacksonville, Tom Lee, Orlando, J. O. Bowen, Washington, D. C.

Interest, attendance and participation in the various business sessions were stimulated by the liberal drawing of attendance prizes which the program committee valued at over \$1,000.00. Among these were three of the state's finest registered Jersey and Guernsey bull calves; two of these were purchased by the Dairy Association from the Dinsmore Dairy Company and the Alpine Dairy. Jacksonville: the other was contributed by the Agricultural Experiment Station from the University of Florida's dairy herd.

Herman Burnett, owner of the Burnett Dairy Farms, Bradenton, who was chairman of this year's Field Day Program Committee, did such a fine job that the Board of Directors of the Association has drafted him for another year. Southern Dairy Products Journal.

Social Security On Farm Labor Starts Jan. 1

AGRICULTURAL WORKERS and non-farm domestic employees will be covered by the Federal Social Security Act on and after January 1, 1951. These workers have been exempt from this law since its passage in 1937. This law provdes Old Age and Survivors Insurance benefits to covered workers.

An agricultural worker regularly employed on a farm is covered when he has been continuously employed for three months or more by one employer and has worked 60 full days and earned \$50.00 in wages in the calendar quarter immediately following the three months of a continuous employment.

Domestic workers in non-farm, private homes are covered after January 1, 1951 if they are employed by a single employer for at least 24 days in a calendar quarter with cash wages of at least \$50.00 paid in the quarter for such services.

Employees Social Security numbers: Every employee in covered employment must have a social security number or file application for a number (Form S.S.5) within 7 days after becoming employed in covered employment.

Every employer of one or more covered workers under the Social Security Act must have an identification number or file an application (Form S.S.4) within seven days after he becomes subject to the Act. For Agricultural Employers, this will mean not later than January 7, 1951.

Both employer and employee applications may be secured from and filed with the nearest office of Collector of Internal Revenue or office of the Social Security

Administration.

Further information will be furnished upon request to the Florida Dairy Industry Association, 220 Newnan St., Jacksonville.

"LOUISE," mother admonished, "you never saw me with such disgraceful dirty hands!"

"No, mother," the quick witted youngster replied, bu: Grandmother

Dairy Update is published quarterly by the Department of Animal Sciences, Institute of Food and Agricultural Sciences, University of Florida. Please address any comments to Albert De Vries, Editor, Dairy Update, PO Box 110910, Gainesville, FL 32611-0910. Phone: (352) 294-6983. E-mail: devries@ufl.edu. The opinions expressed in this newsletter are those of the authors and do not necessarily reflect the view of the University of Florida.
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