



*"The journey is what should bring us happiness not the destination."* — **Dan Millman**

**TUESDAY, APRIL 10, 2018**

**Morning Summary:** Stocks are set to open higher as Chinese President Xi Jinping made comments overnight that he plans to further open up the Chinese economy. He also promised to "significantly lower" import tariffs on products including cars, as well as improve the investment environment for foreign companies. The market deemed the speech as step in the right direction for easing trade tensions between the worlds tow largest economies. At the same time, many inside the trade continue to talk about rotating from cyclical type plays into more defensive investments, especially if credit spreads widen further and the Fed continues to stick with a more hawkish approach. There's talk amongst the bulls that U.S. corporate earnings will again be the saving grace and keep the bull market intact. Personally, I'm worried that the larger bulls have become more nervous and might use the positive earnings or nearby rally as an opportunity to unload some additional length. In other words, I'm worried that the computer models and larger traders might have changed their dance routine. Rather than being big momentum players, buying the "mo-mo" or into the strength, they seem to have become more value oriented and defensive in nature. It just feels like the "music" of the market has changed a bit, and I'm personally uncertain about the latest dance step. Investors today will be closely monitoring Facebook CEO Mark Zuckerberg as he is testifying in front of the Senate Commerce, Science and Transportation Committee as well as the Senate Judiciary Committee. Most suspect he will be facing an array of extremely difficult questions. Large investors are concerned increased data security regulations could dramatically start limiting the earnings power of everything using an online platform, from social media to search engines. At this point nobody seems to sure about how deep down the rabbit hole the government will want to travel. Also in Washington, there's talk that President Trump could deliver details of a retaliatory response towards Syria and they latest chemical attack. I hate to say it, but I'm already starting to hear talk and read more headlines about the November mid-term elections. We are still over 200-days away and the media is already beating the drum. Several political odds makers are already forecasting the Republicans will lose their majority advantage in the House. Some are saying the Senate could come into question if the stock market takes a big nosedive, but I don't think the trade is buying that argument at the moment. Still, some bulls are becoming a bit more nervous about "tariff talks", a possible setback in the stock market and what it could ultimately do to Republican voter enthusiasm this Fall. I personally believe that's too far off on the horizon for the market to give it much actionable credence. Sure we can think about all of the what ifs, polls and odds that are being tossed about, but I don't think money is actually moving or rotating as of yet based on any perceived political shift. Again, be careful listening to too much political noise. Don't forget, big players in the financial world will be reporting first-quarter earnings on Thursday and Friday, they include: BlackRock, Citigroup, JPMorgan Chase, and Wells Fargo.

**U.S. Deficit Raising Some Eyebrows:** *The Congressional Budget Office released data estimating the U.S. deficit is expected to surpass +\$1 trillion by 2020, which is two years earlier than previously thought. The recent tax overhaul and spending increases will boost growth in the near-term, the data suggested. The CBO said the deficit will grow to \$804 billion in fiscal 2018, which ends on Sept. 30, up from \$665 billion in fiscal 2017. Debt held by the public, which has doubled in the past 10 years as a percentage of gross domestic product (GDP), approaches 100 percent of GDP by 2028 in CBO's projections. That amount is far greater than the debt in any year since just after World War II. Read more [HERE](#)*

**Russian Stock Market Takes A Tumble:** *Russian stocks dropped the most in four years, and the ruble was down more than -3% vs. the dollar. The Trump administration announced sanctions against Russian government officials, seven oligarchs with ties to the Kremlin, and the state-owned trading company Rosoboronexport, sending Russia's stock market down by more than -8%. (Source: BusinessInsider)*

# neuro mining



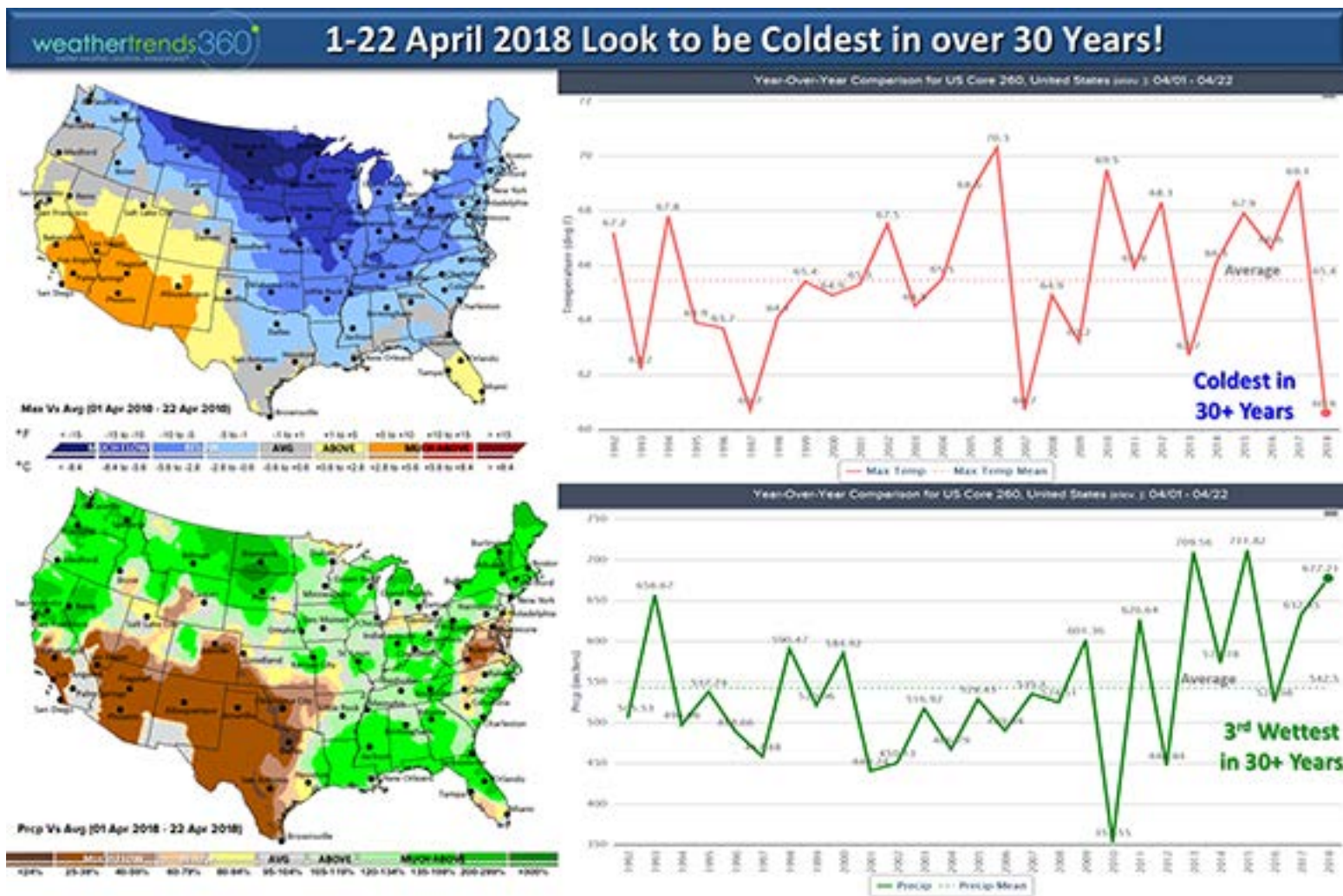
*As we age, it gets harder and harder to create new neural pathways in the brain. It's the reason kids find it so easy to learn new things, but as adults it often gets more difficult. Doing brain teasers and solving riddles can be an important part of keeping our brain healthy. The more connections we can form, the better our brain will be. I hope this helps provide a little daily fun and exercise. The answer to each riddle or puzzle will be located at the bottom of the report.*

**TODAY'S RIDDLE:** *Can you name three consecutive days without using the words Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or Sunday?*

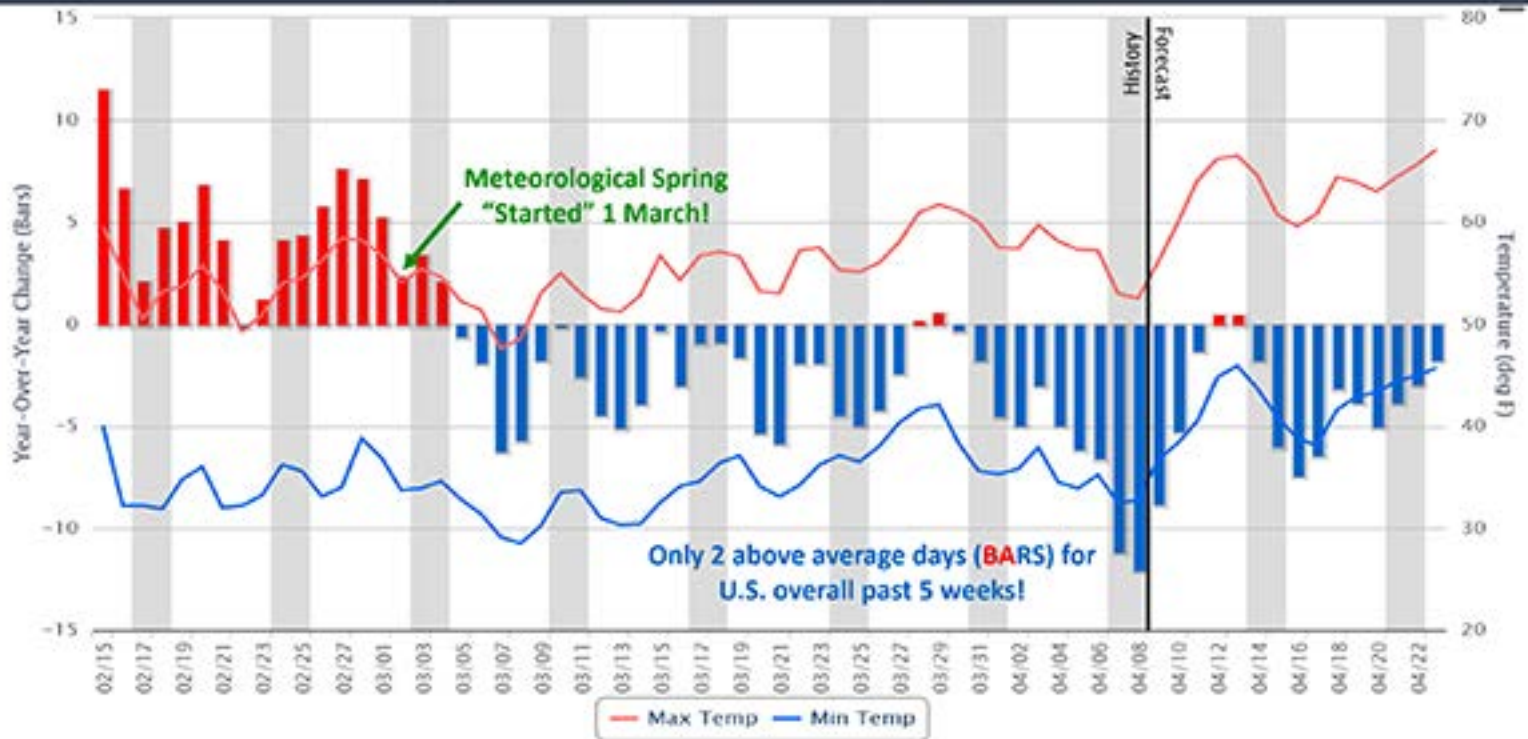
**Weather** forecasts are calling for a brief round of warmer temperatures in the Midwest during midweek. However, this warm spell will be followed by rain or rain changing to snow through northwest areas and moderate to heavy rain with severe thunderstorms in south and east areas later in the week, and then more cold conditions through the weekend. This limits the potential for fieldwork. In the northern Plains, cool to cold conditions with periods of rain or snow remain in effect over the next week. Spring wheat planted acreage may be less than estimated due to the impediment of this cold pattern on fieldwork. No significant precipitation is expected during the next 10 days in southern Plains. Dry weather along with a strong wind event later this week will maintain high stress levels on the developing wheat in the region. Crop ratings remain poor in many areas. In Argentina,

parts of the central region saw moderate to heavy showers and thunderstorms through the past weekend. Rainfall coming this late in the season and following an extreme summer drought is too late to offer corn and soybean benefit. Rain will improve soil moisture for winter wheat planting. In Brazil, central crop areas have favorable soil moisture for developing second crop safrinha corn. Southern areas have a dry forecast which should favor harvest.

**Could Be Coldest April In Over 30 Years:** Looking below at this fantastic forecast from the folks over at [weathertrends360.com](http://weathertrends360.com), we could be in for the coldest first 3 weeks of April going all the way back to mid-1970s. It could also be the 3rd wettest in 30 years. The cold has been relentless since early March as the second chart shows national temperature trends vs average. Only 2 days have seen above average temps for U.S. overall in the past 5 weeks.

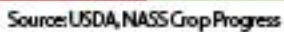






**Corn** bulls are happy to see new-crop DEC18 prices close at their highest level since September 9th. Technical gurus are saying that between \$4.20 and \$4.30 now becomes a much more difficult resistance area. The USDA released their first look at weekly corn planting. I should note, only 8 out of the main 18 states reported planting activity: Texas is the furthest along at 58% planted vs. the 5-year average of 51%; North Carolina is 13% planted vs. 11% average; Kansas is 2% planted vs. 7% average; Tennessee is 2% planted vs. 6% average; Missouri 1% planted vs. 7% average. Illinois, Kentucky and Pennsylvania generally have a little bit planted by this date, but nothing was reported in the recent survey. I should note, Louisiana is running ahead of schedule with 85% planted, Mississippi also slightly ahead of schedule at 55% complete. As for today, the trade is waiting to see the latest supply and demand numbers from the USDA. Most suspect the Argentine and Brazilian crops will be trimmed, but probably not to levels the trade is already forecasting. Meaning no matter what, the bulls will believe the USDA still has more cuts coming in the weeks ahead. Here at home, traders are thinking last years crop will get a bit larger and old-crop ending stocks grow a bit more burdensome, perhaps closer to 2.2 billion bushels. I'm not on the same page, thinking eventually the USDA will paint a slightly more bullish demand picture, especially in regard to export and overall feed demand. I am bullish this market, so many will argue I'm simply talking my position. As a spec, I am only adding length on a major break to the downside. As a producer, I am keeping a close eye on the DEC19 contract, a move north of \$4.30 is certainly worth entertaining in some small capacity as it pertains to reducing longer-term risk. As usual, we will all be a lot smarter and know the answers to the questions in just a few short hours. The USDA will report at 11:00am CST... stay tuned.

## 04/08/18



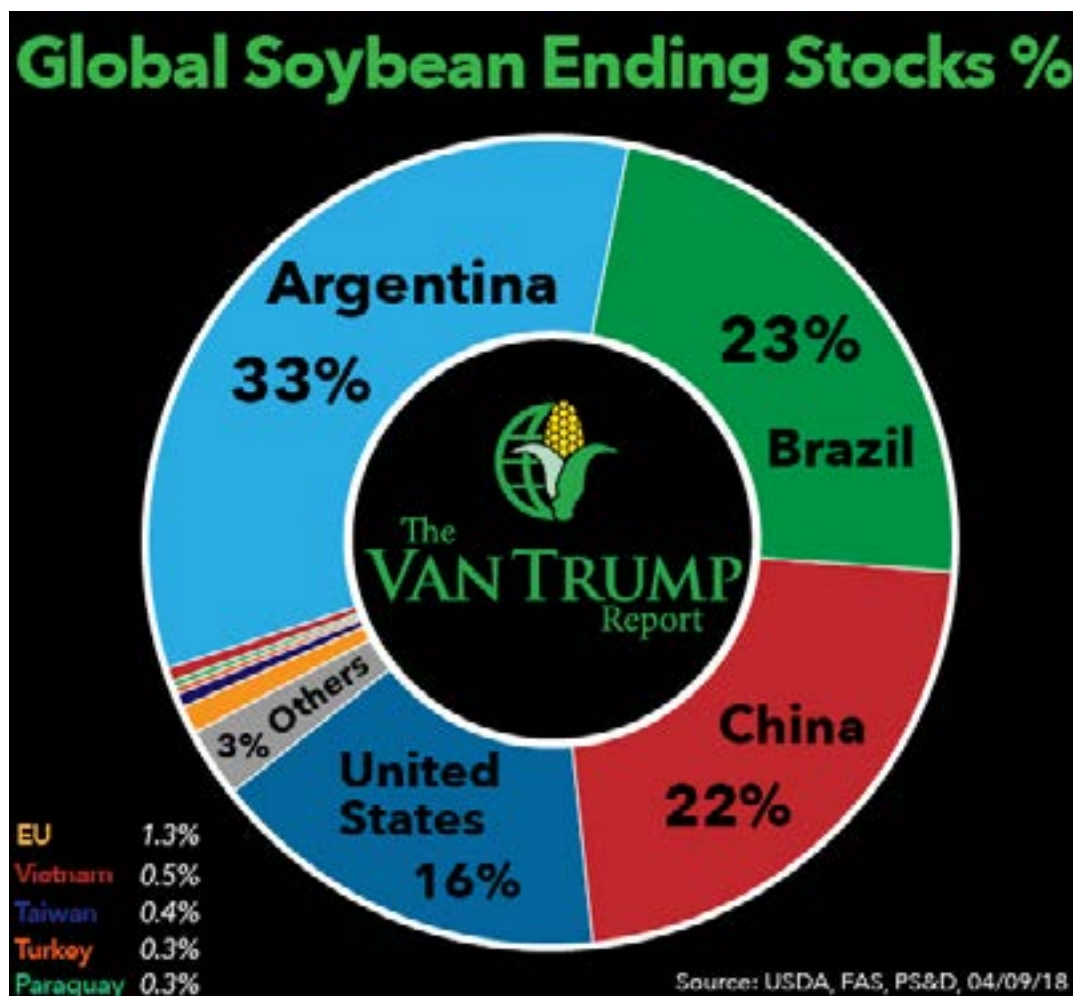
**The VAN TRUMP Report**

Destination	Percentage
China	40%
United States	27%
Others	13%
Brazil	6%
EU	4%
Argentina	3%
Iran	3%
Mexico	2%
South Africa	1%
Egypt	1%
Canada	1%

Source: USDA, FAS, PS&S

Source: USDA, FAS, PS&amp;D, 04/09/18

**Soybean** bulls continue to point towards production hiccups in Argentina and the fact global buyers will ultimately have little choice but to source from U.S. suppliers. For what it's worth, MAY18 soymeal prices are back up near their recent highs and at levels not seen since the summer of 2016. Remember, it was back in early-June of 2012 that soybean prices last traded, even though only momentarily, above \$12 per bushel. U.S. export announcements have been strong as of late and the bulls understand there is going to be more and more pressure put on the U.S. growing season. If the trade starts to believe the U.S. yield is slipping to sub-50 bushels per acre it will become more nervous about available supply. Hence the bulls bet that additional "risk premium" will continue to be added in an effort to ration demand. More nearby, bears are pointing to the fact the USDA will more than likely lower their old-crop export estimate today as Brazil has clearly gained more marketshare, the question is by how much? On the flip side, most suspect the USDA will increase their U.S. crush estimate by +10 to +20 million bushels. Net-net the trade is bracing for a more burdensome domestic supply picture nearby. Some insiders are even saying old-crop ending stocks could push north of +600 million bushels. Bears also continue to point towards more headline risk for soybeans as Washington tries to renegotiate trade deals. Personally, I see both the bull and bearish argument making sense. To me it feels like the fundamentals the bulls are talking about will ultimately come home to roost, but it might take a while to play itself out and at the same time take us on an extremely volatile ride in getting there. The bearish arguments make a lot of sense on a shorter-term perspective and are keeping me on the sideline. I'm worried that the funds being short-term and headline oriented could move their bullish bets to the sideline and pressure the trade before the actual supply shortages start to be felt. As a spec, I would like to build a longer-term bullish strategy, but only on a much deeper break in price. As a spec, I will be looking to reduce more old crop and new-crop risk on significant move higher.





**Wheat** bulls are talking about more extreme U.S. weather as well as the USDA again lowering their weekly winter crop-condition estimate from 32% down to just 30% now rated "Good-to-Excellent" vs 53% last year at this stage. From what I understand, this is our second lowest condition rating on record for this time of year. Bears are pointing to the fact winter wheat conditions in Colorado +3, Illinois +4, Kansas +3, Oklahoma +1, Nebraska +7 and South Dakota +5 all improved a bit last week. The weekly USDA report also showed 2% of spring wheat as planted vs. 6% on average this time of year. Idaho 11% planted vs. 32% on average; Washington 27% planted vs. 33% on average. Minnesota, Montana, North Dakota and South Dakota reported 0% planted vs. generally an average of 2% to 16%. The concern now is with another round of extremely cold temps and blizzard like conditions later this week are making some wonder how many Spring acres will be lost. Winter wheat was reported at 3% headed vs. 4% on average. From a technical perspective, the bulls are saying it was important to see the JUL18 SRW contract close back above \$5.00 per bushel and the JUL19 SRW wheat closed back above \$5.70 per bushel. The JUL18 HRW contract closed back above \$5.40 and the JUL19 HRW contract traded back above \$6.00 per bushel. The Spring wheat contract has also made a significant jump higher the past three trading sessions, gaining +50 cents. The SEP18 contract closed back above \$6.40 and is pushing psychological resistance at \$6.50 per bushel. Keep in mind, we would have to go back to the end of July to find a close above \$6.50 per bushel. In other words, producers who have been wanting to make catchup sales and or looking to reduce more longer-term risk should be taking advantage in some capacity. As for today, the bears are thinking the USDA is going to again lower U.S. export a touch and at the same time raise their Russian wheat export estimate. World ending stocks are thought to see very little change and remain burdensome.

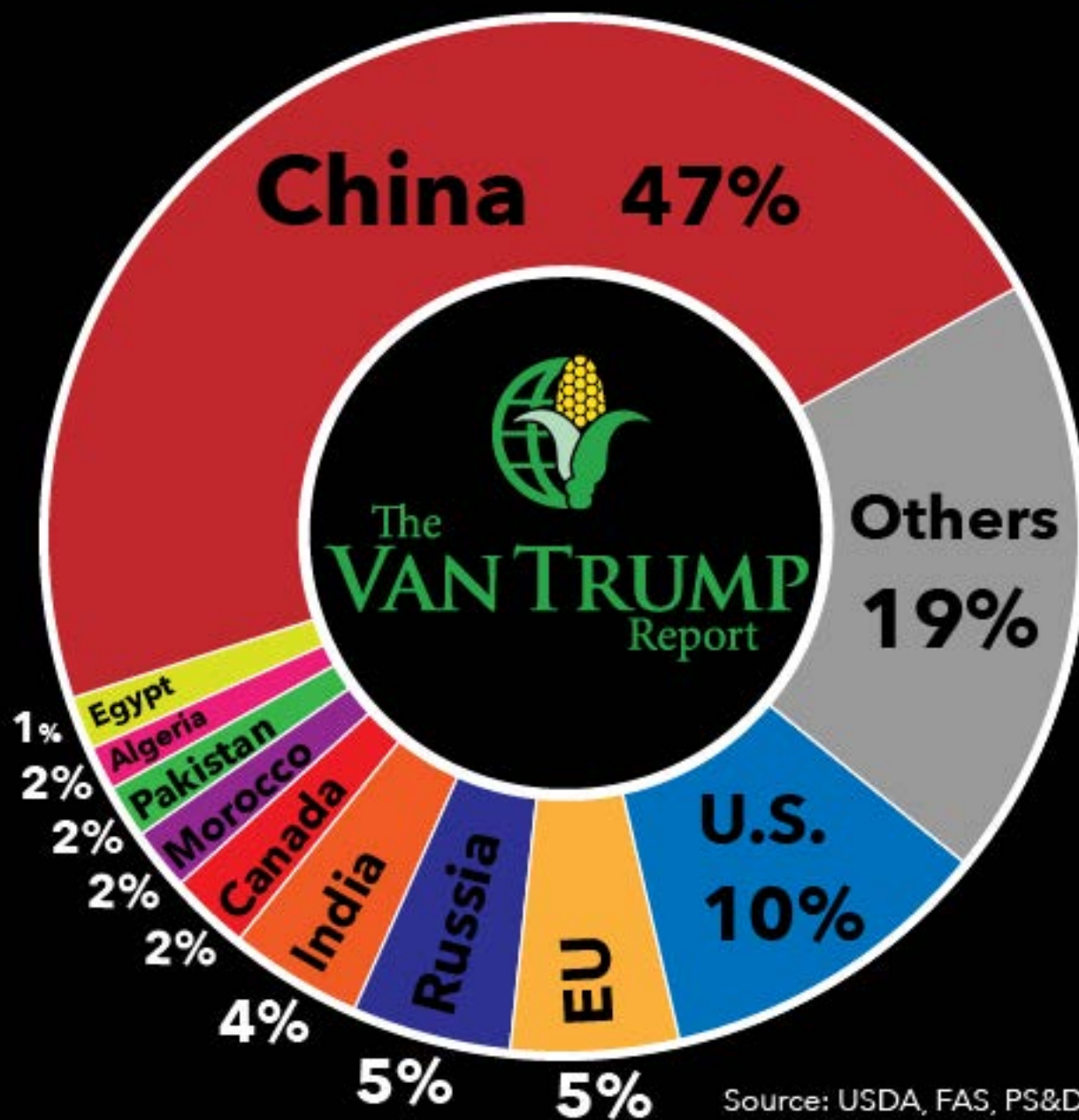
## Winter Wheat Conditions

04/08/18



Source: USDA, NASS Crop Progress

# Global Wheat Ending Stocks %



Source: USDA, FAS, PS&D, 04/09/18



**US 2017/18 Ending Stocks (in billion bushels)**

	<b>USDA April 2018</b>	<b>Avg. Trade Est.</b>	<b>Trade Range</b>	<b>USDA March 2018</b>
<b>Corn</b>	???	2.189	2.067 - 2.265	2.127
<b>Soybeans</b>	???	0.574	0.545 - 0.625	0.555
<b>Wheat</b>	???	1.036	0.989 - 1.060	1.034

**World 2017/18 Ending Stocks (in million metric tons)**

	<b>USDA April 2018</b>	<b>Avg. Trade Est.</b>	<b>Trade Range</b>	<b>USDA March 2018</b>
<b>Corn</b>	???	197.29	191.50 - 202.00	199.17
<b>Soybeans</b>	???	92.95	91.00 - 96.00	94.40
<b>Wheat</b>	???	268.16	266.50 - 270.00	268.89

**South American Production (in million metric tons)**

	<b>USDA April 2018</b>	<b>Avg. Trade Est.</b>	<b>Trade Range</b>	<b>USDA March 2018</b>
<b>Brazil Corn</b>	???	92.71	86.5 - 96.0	94.5
<b>Brazil Soybeans</b>	???	115.25	113.3 - 117.0	113.0
<b>Argentina Corn</b>	???	33.74	32.0 - 36.0	36.0
<b>Argentina Soybeans</b>	???	42.66	40.5 - 46.0	47.0



**> Washington Will Protect U.S. Farmers:** *U.S. farmers will be protected by the Trump administration during rising trade tensions between the United States and China, Agriculture Secretary Sonny Perdue said on Monday. "We're not going to allow agricultural producers to bear the brunt of Chinese retaliation as we defend our own interests," Perdue said in a speech to the National Rural Electric Cooperative Association in Washington. He declined to provide further details. (Source: Reuters)*

**> U.S. DOJ Takes First Steps To Approve Bayer, Monsanto Deal:** *The Wall Street Journal reported yesterday that the Justice Department had decided to allow Bayer AG's megadeal to acquire Monsanto Co., valued at more than \$60 billion, after the companies pledged to sell off additional assets to secure government antitrust approval, according to people familiar with the matter. The companies announced the deal in September 2016 to create a new agricultural powerhouse. Germany's Bayer, a pharmaceutical and chemical conglomerate, is a leading player in the pesticide industry, while Monsanto, based in St. Louis, is a market leader on seeds and crop genes. The deal will make Bayer the world's biggest supplier of pesticides and seeds for farmers. Dow Chemical Co. and DuPont Co. last year completed a merger that united the companies' agricultural divisions, which eventually will be spun out into a new company called Corteva Agriscience. Swiss seed and pesticide maker Syngenta AG last year completed its \$43 billion sale to China National Chemical Corp., expanding the state-owned company's high-tech seeds and pesticides. (Source: [Wall Street Journal](#))*

**> Brazil's Soybean Crop Getting Bigger:** *AgRural has bumped their soybean crop estimate higher to a record of 119 MMT vs. a previous estimate of 117.9 MMTs. They forecasts Brazil's total corn crop at just 80.6 MMTs, which is well below the current USDA estimate.*

**> Argentine Cattle Shortage:** *Argentina's herd will be hit hard by drought. Argentina's herd is expected to shrink by up to 1 million cattle next year as the country navigates through its worst drought in decades. (Source: Business Insider)*

**> Finding The Right Corn Hybrid:** *To simultaneously feed a growing population while minimizing its environmental footprint, corn breeders need to improve nitrogen-use efficiency and crowding tolerance, all while maximizing yield. The first step, according to a new study from the University of Illinois, is understanding the genetic yield potential of current hybrids. Fred Below, professor of crop physiology in the Department of Crop Sciences at U of I evaluated 101 commercially available elite hybrids at two planting densities and three nitrogen fertilizer rates across multiple years and locations. Read more about the study [HERE](#).*

**> Changing Meat Preferences:** *Some 60% of consumers say they're cutting back on*

meat-based products, substituting beef burgers in favor of plant-based alternatives. However, demand for meat is still high and growing with key consumer segments. According to the U.S. Department of Agriculture, the average U.S. consumer will eat 222.2 pounds of red meat and poultry in 2018, a record high. Interestingly, One interesting finding from the new "Power of Meat" study focuses on how consumer attitudes have changed when it comes to buying meat online. There has been an impressive change here, up from 4% in 2015 to 19% in 2018, meaning more and more folks are using home delivery services and meal kits. (Source: fooddive)

**> Corn Exports Increase While Soybeans Fall:** According to the USDA, weekly corn exports increased 34% to 1.94 mt, while expectations were only 1.45. Soybeans exports dipped 35%, falling short of weekly expectations. Japan and Mexico were responsible for picking up the bulk of the volume. Over 1 million mt was shipped out of the Gulf while the rest left from the PNW.

**> Scientists Harvest 1st Vegetable in Antarctic Greenhouse:** Scientists in Antarctica have harvested their first crop of vegetables grown without earth, daylight or pesticides as part of a project designed to help astronauts cultivate fresh food on other planets. Researchers in Germany say they picked 8 pounds of salad greens, 18 cucumbers and 70 radishes grown inside a high-tech greenhouse as temperatures outside dropped below -4 degrees F. This project aims to produce a wider range of vegetables that might one day regrown on Mars or the Moon. (Source:AP)

**> Iowa Farmland Values Gain 3%:** The average value of an acre of Iowa farmland is \$6,951 which is a 2.9% increase for the six-month period ending March 1. That is according to the twice-yearly survey conducted by the Iowa Chapter of the Realtors Land Institute. An average acre of Iowa farmland increased nearly 5% for the year ending March 1. The annual increase ends the four year decline in farmland values since their March 2013 high. Yet, values are down 20% from the 2013 high. (Iowa Realtors Land Institute)

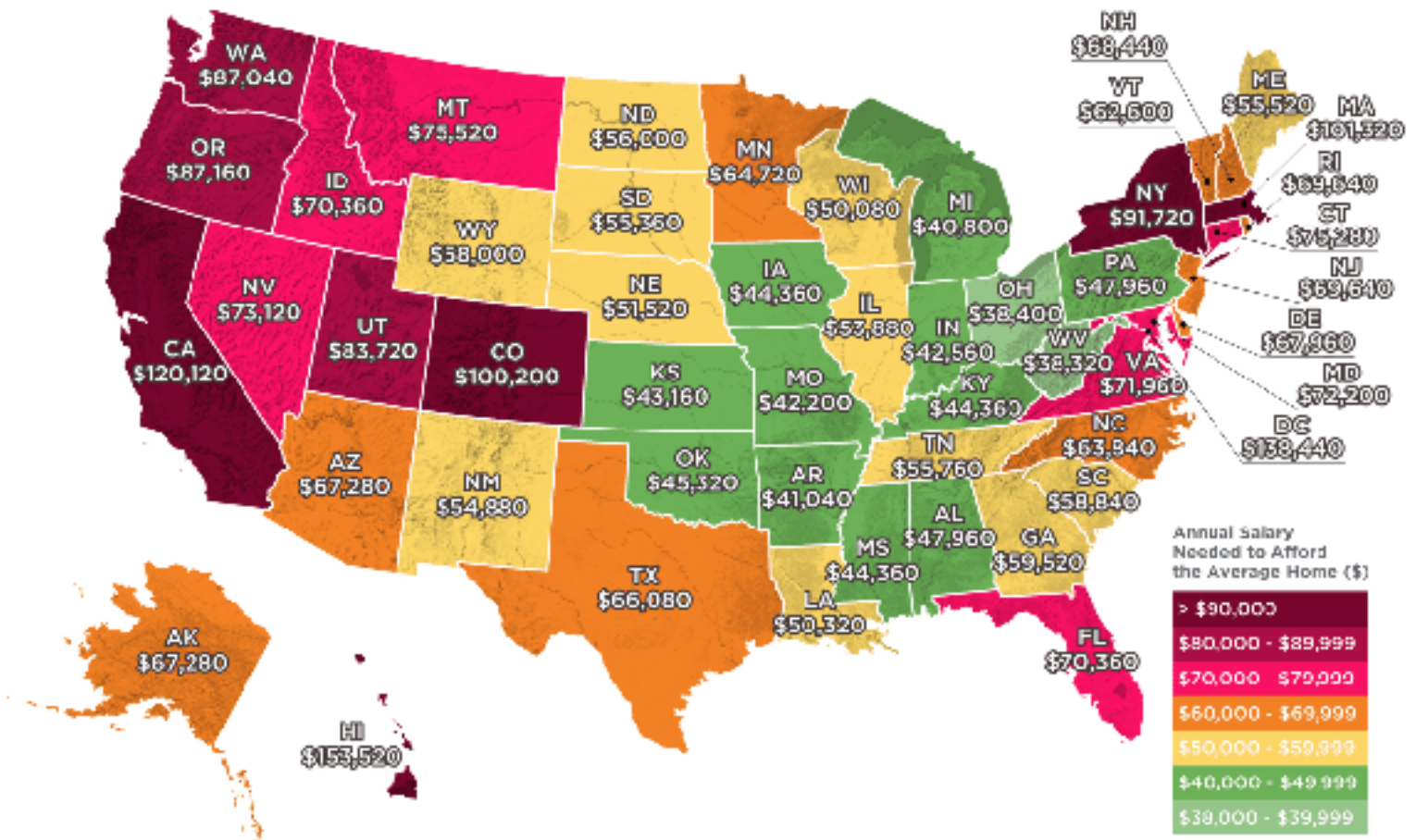
**> Russia Is Considering Replacing The U.S. Dollar...** in crude oil payments on deals with Turkey and Iran, Energy Minister Alexander Novak said as quoted by RT. According to Novak, "There is a common understanding that we need to move towards the use of national currencies in our settlements. There is a need for this, as well as the wish of the parties. This concerns both Turkey and Iran – we are considering an option of payment in national currencies with them. This requires certain adjustments in the financial, economic and banking sectors." Iran, under threat of returning U.S. sanctions, two months ago decided to ditch the greenback as a currency in its imports. (Source: [oilprice.com](http://oilprice.com))

**> Income Needed to Afford the Average Home in Every State:** The housing market has not only recovered its pre-recession levels, but some observers are actually starting to worry about yet another housing bubble. Housing prices are on the rise, thanks in large part to extremely tight inventory, so it's worth asking: are potential home buyers getting priced out of the market? The answer depends on where they live and how much money they make. Read more at [ValueWalk](http://ValueWalk)



# Salary You Need to Afford the Average Home in Your State

(Based on a 30-year Mortgage with a 10% Down Payment)



## Article & Sources:

<https://howmuch.net/articles/salary-to-afford-the-average-home-in-your-state>  
<https://howmuch.net/sources/salary-to-afford-the-average-home-in-your-state>  
<https://www.zillow.com/mortgage-calculator/>

howmuch.net



**Northwest Illinois** - We have had two good seasons in a row and were able to pick up more acres for this year. We paid between \$5,000 and \$8,400 for the purchase. If weather cooperates we can be in the field soon but I'm guessing it is more like late April. We have already locked in 90% of our 2018 beans and 40% of 2019 corn. Nothing changing here on acres planted, as we will stick with our normal rotation. Rents are going for about \$250. We are holding on to the belief that President Trump's tactics will pay off in the long run.

**Eastcentral Illinois** - We dealt with lots of replanting last season but still did well. The corn ran better than expected after all that, hitting 200bpa - 230bpa. There were guys getting 280bpa near us but we can't complain. Beans were anywhere from 55bpa to 80bpa. Some of our wheat hit as high as 98bpa as well. We are seeing the farmers, the

*tech and the genetics just keep getting better. We have been tiling fields each year as we can and it has definitely been worth the time and effort.*

**Northeast Colorado** - *We had a good season last year, the corn yield was very good. We have both a feed yard and an ethanol plant to deliver to. We should get going here by the end of April if all goes well. Our winter wheat is in need of a little moisture but nothing like the boys in the southern plains. It looks rough down there. We are seeing a lot more medical marijuana around here as guys seek to profit off the new industry. I'm guessing some of these folks will be 'weeded' out in less than a couple of years. We are also seeing more organic hay being grown.*



**China Starts Moving Old Crop Corn:** *China will start selling old corn stocks from state reserves this week, pressuring prices in the world's second-biggest consumer of the grain and offering some respite to livestock farmers from rising costs, said traders and analysts. The first sales of 2018 will take place on April 12 and 13, the National Grain Trade Center said in a notice last week, offering almost 7 million tonnes largely from the 2014 crop. The sale was moved a month earlier in an attempt to help with the current higher prices. Read more [HERE](#).*

**Cool Facts About These Ancient Archaeological Sites In The U.S.:** *American history, as it is conventionally taught, skips a great deal. As far as most high school students know, the story of the United States began in the late 1400s when European explorers first established sailing routes across the Atlantic. That's a highly edited account of history, forgetting that the U.S. first had occupants more than 12,000 years ago! These millennia deserve more than a mere mention in a history textbook. If you like history and traveling the U.S., check out some possible destinations for your next trip. Read more [HERE](#).*

**How 'Knowhere' News Takes Out The Bias:** *Here's how it works. First, the site's artificial intelligence chooses a story based on what's popular on the internet right now. Once it picks a topic, it looks at more than a thousand news sources to gather details. Left-leaning sites, right-leaning sites – the AI looks at them all. Then, the AI writes its own "impartial" version of the story based on what it finds. This take on the news contains the most basic facts, with the AI striving to remove any potential bias. The AI also takes into account the "trustworthiness" of each source, something Knowhere's co-founders preemptively determined. This ensures a site with a stellar reputation for accuracy isn't overshadowed by one that plays a little fast and loose with the facts. Read more [HERE](#).*

**Getting A Heads Up Before The Next Earthquake:** *Not everyone is likely to need a warning for the next earthquake, but for those living in areas prone to the occurrence, this app could provide enough time to take cover or avoid driving onto the overpass. I'm told those who had the beta Quake Alert application on their smartphones got about a 30-sec-*



and warning before the shaking hit at 12:29 p.m. on April 5th off the coast of California. More than enough time to take action. Read more [HERE](#).

**Keeping A Promise.... Girlfriend Pushes Paralyzed Boyfriend Ahead of Race:** *Living boldly and brave amidst their current circumstances, Kaitlyn Kiely pushes a racing wheelchair filled with three 50-pound bags of salt through the cold streets of Boston as she prepares to push her boyfriend Matt Wetherbee over the 26.2 miles of the Boston Marathon Course. Unfortunately, only six due couples are permitted this year and those were already chosen, but that wasn't enough to stop Kiely from keeping her promise. Read more [HERE](#).*

**World Busiest Airports:** *The center of gravity for world aviation is continuing its eastward shift, with China and India poised to feature among the world's top three air-travel markets by 2020 as rising incomes make fares more affordable, Montreal-based ACI said. The Asia Pacific region is likely to have 3.5 billion passengers by 2036, adding more than double the forecast for North America and Europe combined, according to estimates by the International Air Transport Association. Read more [HERE](#).*

### World's Busiest Airports

New York's JFK has dropped out of the top 20, thanks to the growth of travel in Asia

Rank	Airport Name	Location	Passengers (2017)	% change from 2016
1	Hartsfield-Jackson Atlanta International	United States	103,903,000	-0.3
2	Beijing Capital International	China	95,786,000	1.5
3	Dubai International	United Arab Emirates	88,242,000	5.5
4	Tokyo International (Haneda)	Japan	85,409,000	6.5
5	Los Angeles International	United States	84,558,000	4.5
6	O'Hare International	United States	79,828,000	2.4
7	Heathrow	United Kingdom	78,015,000	3
8	Hong Kong International	Hong Kong	72,664,000	3.4
9	Pudong International	China	70,001,000	6.1
10	Paris-Charles de Gaulle	France	69,471,000	5.4
11	Amsterdam Schiphol	Netherlands	68,515,000	7.7
12	Dallas/Ft Worth International	United States	67,092,000	2.3
13	Guangzhou Bai Yun International	China	65,887,000	10.3
14	Frankfurt/Main	Germany	64,500,000	6.1
15	Atatürk International	Turkey	63,872,000	6
16	Indira Gandhi International	India	63,452,000	14.1
17	Soekarno-Hatta International	Indonesia	63,016,000	8.3
18	Singapore Changi	Singapore	62,220,000	6
19	Incheon International	South Korea	62,158,000	7.5
20	Denver International	United States	61,379,000	5.3

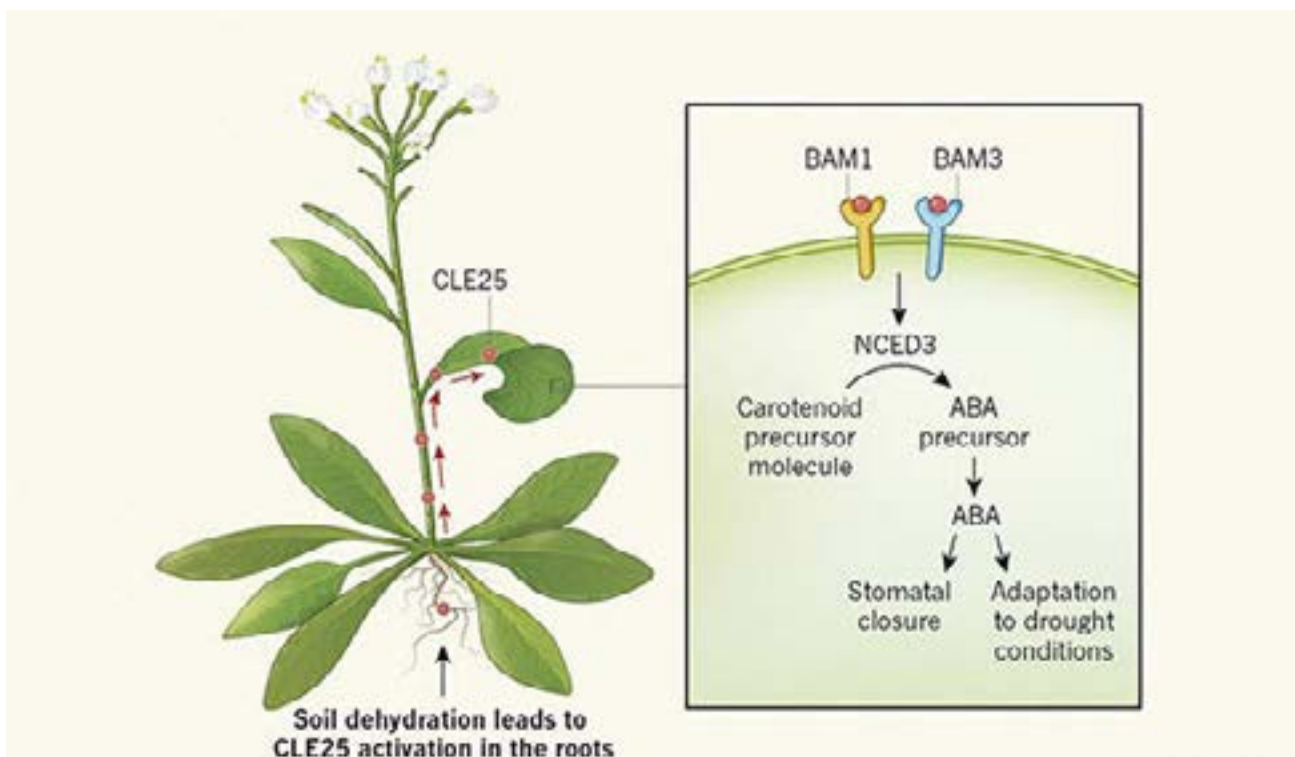
Source: Airports Council International  
Note: Preliminary rankings for 2017 with respect to total passenger traffic





## Scientists Hope To Reduce Dehydration Stress In Plants

Researchers at the RIKEN Center for Sustainable Resource Science (CSRS) in Japan have recently discovered a hormone in plants that retains water whenever none is available from the soil. Researchers were able to uncover how the peptide CLE25 moves from the roots and into the leaves when water is unavailable, causing the leaf spores to close. Understand, in humans peptide hormones will keep our bodies in check when the environment changes. For instance, when our blood pressure is low, we produce the hormone vasopressin, which travels through the bloodstream to narrow arteries thus restoring our blood pressure. I'm told, scientists hope to find out whether plant hormones can similarly respond to physical stress or dehydration in this case. Through the application of many CLE peptides, it was determined that only CLE25 lead to increased ABA in the leaves and thus more pore closure, as well as having a larger presence in the roots of plants as they are subjected to dehydration stress. With this in mind, the team needed to determine if the CLE25 moved through the plant's circulatory system. Using a high sensitive mass spectrometry system, the team was able to tag and track the molecules from root to leaf. Finally, the team examined several mutants and discovered that BAM1/BAM3 receptors in the leaf were the link between CLE25 and ABA production. It is worth noting that in the study of mutant plants lacking CLE25 or ABA, after only three hours of dehydration, the plants showed seven times less leaf ABA and had lost more water than the control set. Obviously, more work will need to be done, but I have to imagine with gene editing technology, researchers will one day be able to develop abiotic stress-resistant crops as well as add functional peptides into fertilizer as well. Great upside potential. (Source: [science-daily](https://www.sciencedaily.com))





(top) Before dehydration. (bottom) Rehydration after dehydration. (left column) A control plant. (right two columns) Two cle25 mutant plants. While normal plants can be revived after being subjected to dehydration, mutants lacking CLE25 cannot be. Additionally, control plants lost less water during dehydrations (images not shown).

*Credit: RIKEN*

### **Will China Devalue Their Currency... What You Need To Know**

There has been a lot of talk inside the markets as of late, regarding the Chinese and how they could start more aggressively devaluing their currency. The general and elementary thought is that the Chinese will try and offset U.S. tariffs by devaluing their own currency. This would provide some discount to buyers and importers of Chinese goods, which would help offset some of the premiums added by widespread U.S. tariffs. I should note, the



Chinese yuan has gained about +9% against the U.S. dollar since President Trump took office and has been fairly steady in recent weeks despite the escalation of trade tensions between the world's two largest economies. In fact, just this past month, the Chinese currency touched its strongest level since August 2015. While a weak yuan could help shore up China's export industries, a devaluation comes with a bit of risk. Obviously it would further brand China as a currency manipulator but perhaps more importantly it would make it more difficult for Chinese companies to service their mountains of offshore debt. It would also expose China to the risk of local financial market volatility, which is something Chinese officials have worked hard to subdue in recent years. If you remember back to August 2015 when China unexpectedly devalued the yuan by -2%, the move sent shock-waves through the global markets. Many suspect the volatility and manipulation would spook some of the larger global investors, leading to significant capital outflows. Rather than devaluing their own currency, some insiders believe the Chinese are kicking around a few alternative different ideas, like selling a portion of their U.S. Treasury holdings, of which it held at least \$1.2 trillion at the end of last year, or perhaps aggressively targeting and selling select U.S. stocks that are heavily held by the public. If China were to aggressively sell U.S. Treasuries, many suspect it would cause the U.S. dollar exchange rate to weaken, which would in turn make Chinese exports more expensive and U.S. exports more attractive. Bottom-line, there's a ton of moving parts in play right now. We will continue to monitor this situation closely. (Source: Bloomberg)



### **Take A Guess On Americas Top Dog Breed?**

Without a doubt dogs are the greatest human companion ever! While it is true that everyone's dog is the best dog in the world, the American Kennel Club continues to release their list of the 10 most popular dog breeds. The Labrador Retriever, known for their intelligence, family friendliness and great trainability, holds on to the number one spot for a record-breaking 27th consecutive year. The Lab's eager to please temperament is just one of many reasons why this ideal family dog takes top honors year after year. The German Shepherd secured its spot as the second most popular breed. This smart, confident and courageous breed is known as a superior working therapy and guard dog. Interest-



ingly, the Boxer officially fell off the list this year after dropping in each of the past five years. Taking its place in the top-10 is now the German Shorthaired Pointer. I should also note, the French Bulldog, jumped over the Beagle and the traditional Bulldog to claim the #4 spot. The Rottweiler continues to surprise many as it has been slowly climbing up the ranks over the past decade. The confident, loyal and loving Rottie was actually this past years eighth most popular breed, it's highest ranking since landing at number two back in 1997. The Rottweiler has risen nine spots over the past decade and is making a strong comeback. The Rottie has strong instincts to protect its loved ones, is intelligent and has a strong willingness to work. What some folks might not know is that they're especially impressive when it comes to herding. If you are in the market - check out the 10 most popular breeds below with links to further explore. I have also included a link that includes 189 dog breeds with their current and previous rankings. To access the list Click [HERE](#) (Source: [akc.org](http://akc.org))

1. [Labrador Retriever](#) - *Early in the 1800s, some of the multipurpose dogs used in North America - mostly Canada - by hunters were shipped back to England. Many of these "water dogs" were of the Newfoundland type, but the smaller ones were often designated "St John's" dogs. In England, the breed was developed and refined- probably with some flat-coated retriever input - into the breed we recognize today.*
2. [German Shepard](#) - *In Europe during the 1850s, attempts were being made to standardize breeds. The dogs were bred to preserve traits that assisted in their job of herding sheep and protecting flocks from predators. In Germany this was practiced within local communities, where shepherds selected and bred dogs that they believed had the skills necessary for herding sheep, such as intelligence, speed, strength, and keen senses of smell. The results were dogs that were able to do such things, but that differed significantly, both in appearance and ability, from one locality to another.*
3. [Golden Retriever](#) - *The Golden Retriever was originally bred in Scotland in the mid-19th century. At that time, wildfowl hunting was a popular sport for the wealthy Scottish elite, but the existing retriever breeds were inadequate for retrieving downed game from both water and land. Retrieving from both land and water was necessary because the hunting grounds of the time were pocketed with marshy ponds and rivers. Consequently, the best water spaniels were crossed with the existing retrievers, resulting in the establishment of the breed today known as the Golden Retrievers.*
4. [French Bulldog](#) - *French bulldogs' jumped two spots from 6 to 4 this past year. Though their origins are murky, most sources trace their roots to English bulldogs. Lace makers in England were drawn to the toy version of the dog and would use the smaller pups as lap warmers while they worked. When the lace industry moved to France, they took their dogs with them. There, the English bulldogs probably bred with terriers to create bouledogues français, or French bulldogs.*
5. [Bulldog](#) - *The designation "bull" was applied because of the dog's use in the sport of bull baiting. This entailed the setting of dogs - after placing wagers on the dogs - onto a tethered bull. The dog that grabbed the bull by the nose and pinned it to the ground would be the victor. It was common for a bull to maim or kill several dogs at such an event, either by goring, tossing, or trampling. Over the centuries, dogs used for bull-baiting developed the stocky bodies and massive heads and jaws that typify the breed*

as well as a ferocious and savage temperament. Bull-baiting, along with bear-baiting, reached the peak of its popularity in England in the early 1800s until they were both made illegal by the Cruelty to Animals Act 1835.

**6. [Beagle](#)** - General Richard Rowett from Illinois, USA imported some dogs from England and began breeding. Rowett's Beagles are believed to be the models for the first American standard. The Beagle was accepted as a breed by the American Kennel Club (AKC) in 1884. In the 20th century the breed has spread worldwide as a very popular dog. Now, the Beagle was not just used for hunting; the Beagle became a family pet.

**7. [Poodle](#)** - The poodle is a group of formal dog breeds, the Standard Poodle, Miniature Poodle and Toy Poodle. The origins of the poodles are still discussed with a dispute over whether the poodle descends from the old French Barbet breed or from Germany as a type of water dog. Ranked second most intelligent dog breed just behind the Border Collie, the poodle is skillful in many dog sports and activities, including agility, obedience, tracking to herding, circus performers or assistance dogs. Poodles have taken top honors in many conformation shows, including "Best in Show" at the Westminster Kennel Club Dog Show in 1991 and 2002.

**8. [Rottweiler](#)** - The Rottweiler is a breed of domestic dog, regarded as medium-to-large or large. The dogs were known in German as Rottweiler Metzgerhund, meaning Rottweil butchers' dogs, because one of their uses was to herd livestock and pull carts laden with butchered meat to market. This continued until the mid-19th century when railways caused droving to be replaced with herding. Rottweilers are now used as search and rescue dogs, as guide dogs for the blind, as guard dogs and police dogs.

**9. [Yorkshire Terrier](#)** - The Yorkshire Terrier is a small dog breed of terrier type, developed during the 19th century in Yorkshire, England, to catch rats in clothing mills. The defining feature of the breed is its maximum size of 7 pounds, although some may exceed this and grow up to 15 pounds.

**10. [Pointer \(German Shorthair\)](#)** - The German Shorthair Pointer replaces the Boxer on the top-10 list. The Pointer has been climbing each of the past several years, while the Boxer has been tumbling. The German Shorthair Pointer is an enthusiastic gundog of all trades who thrives on vigorous exercise, positive training, and a lot of love. These dogs are known for power, speed, agility, and endurance. "Noble" and "aristocratic" are words often used to describe the overall look.



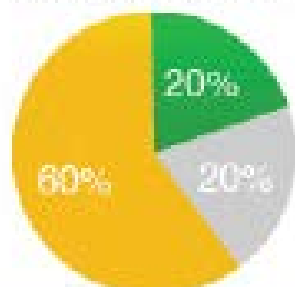




# CASH SALES & HEDGING TOTALS

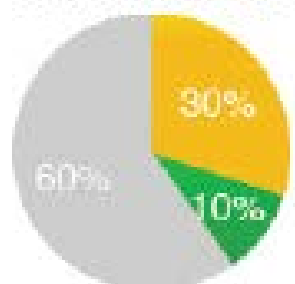
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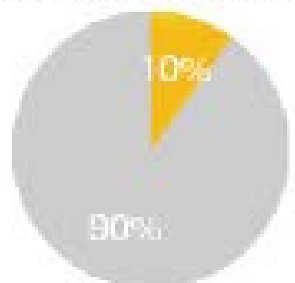
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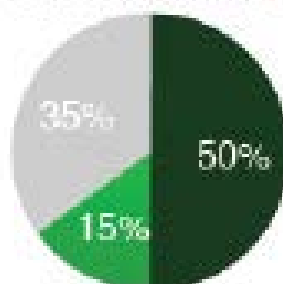
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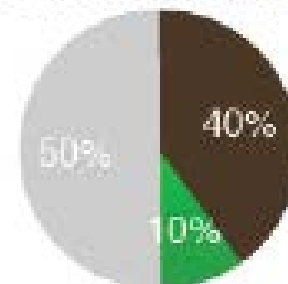
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