

# ARIZONA AGRICULTURE

AN INDUSTRY OF GROWTH AND  
ECONOMIC POWER

**WHAT IS THE VALUE OF  
THE AGRICULTURE  
INDUSTRY TO ARIZONA?**

AS OF 2014

\$17 BILLION DOLLARS OF  
ECONOMIC ACTIVITY

88,000 +/- JOBS

# THE FOLLOWING AGRICULTURE BUSINESS SECTORS MAKE UP THE

DAIRY FARMS AND MILK DISTRIBUTION  
CENTERS

COW CALF OPERATIONS

FEEDLOT OPERATIONS

SEEDSTOCK OPERATIONS

GRAIN AND COTTON FARMS

ALFALFA AND GRASS HAY FARMS

CITRUS GROVES

DATE FARMS

WINTER VEGETABLES

NUT GROVES

SPECIALTY CROPS

SEED CROP FARMS

POULTRY

HOGS

NURSERY INDUSTRY

WATERMELON AND CANTALOUPE

ROSES

AQUACULTURE (STRIPED BASS,  
TALPIA)

EQUINE OPERATIONS

LIVESTOCK AUCTIONS

## AG ECONOMY

IMPLEMENT DEALERS

EQUIPMENT DEALERS

AUTOMOBILE DEALERS

FUEL COMPANIES

PROPANE DEALERS

NATURAL GAS COMPANIES

FEED, SEED, FERTILIZER AND

CHEMICAL COMPANIES

VETERINARIANS

PHARMACEUTICAL COMPANIES

FEED STORES

HARDWARE STORES

WELDING SHOPS

TIRE COMPANIES

UTILITY COMPANIES

IRRIGATION SUPPLY COMPANIES

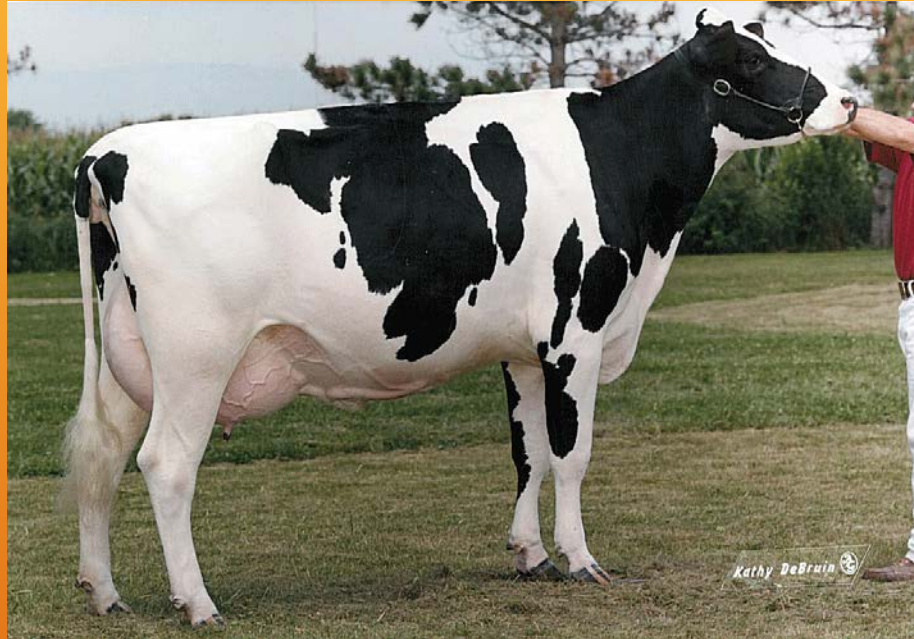
PCAs

BANKS AND LENDING INSTITUTIONS

LABOR CONTRACTORS



# HOW MUCH IS THE DAIRY INDUSTRY WORTH IN ARIZONA TODAY?



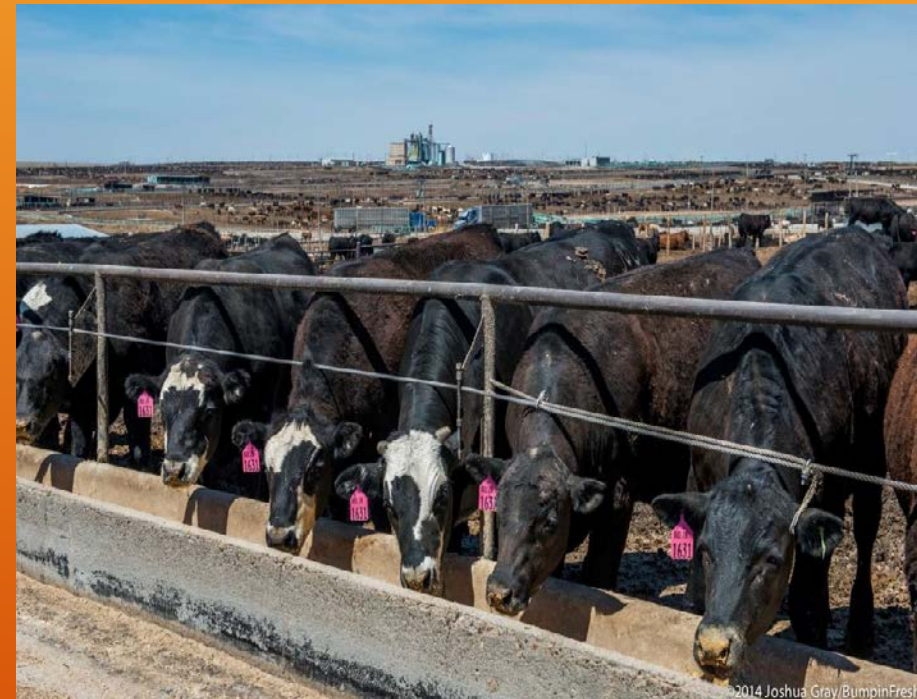
DAIRY FARMS IN THE STATE OF ARIZONA \$2 BILLION DOLLARS  
DAIRY PROCESSING FACILITIES IN ARIZONA \$1 BILLION DOLLARS  
VALUE OF THE DAIRY HERD IN ARIZONA 190,000 COWS = \$380,000,000.  
TOTAL NUMBER OF DAIRY JOBS IN THE STATE OF ARIZONA = 16,540  
ARIZONA HAS THE LARGEST AND MOST MODERN AND UP-TO-DATE DAIRIES IN THE WORLD.  
TOTAL IMPACT OF THE DAIRY PRODUCT SALES IS \$3 TO \$5 BILLION DOLLARS A YEAR.

# HOW MUCH IS THE CATTLE INDUSTRY WORTH IN ARIZONA TODAY

Value of Cows and Calves Sold  
\$892,000,000.00

Value of beef cow herd in Arizona 180,000 head = \$270,000,000.00

Value of Cattle on Feed 2015 fed 375,000 head at a value of \$637,000,000.00 est.  
2.8 billion pounds of beef ENOUGH TO FEED 4.6 MILLION AMERICANS



# Financial Contribution by the Beef Industry to the State of Arizona !

Impact Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	\$1,212,768,378.00	\$235,835,672.00	\$166,545,091.00	\$1,705,149,141.00
Value Added	\$168,323,652.00	\$160,933,702.00	\$101,875,619.00	\$431,132,973.00
Employment	5,411	1,974	1,373	8,758
Labor Income	\$101,033,446.00	\$81,555,669.00	\$57,366,323.00	\$239,955,438.00



# Beef Innovation from 1950 to 2016



# Agriculture Innovation



2016 the Average Dairy Cow produces 22,000 pounds of milk a year.

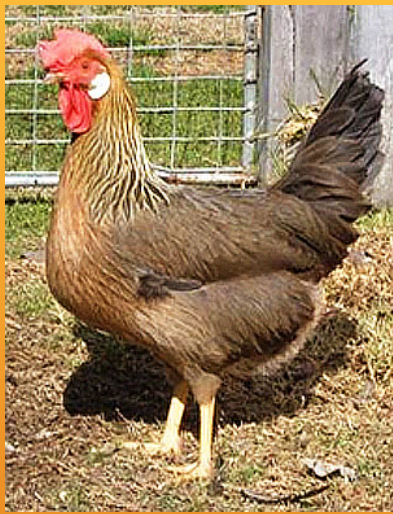


1950 the Average Dairy Cow produced 5,500 pounds of milk a year



# Agriculture Innovation 1950 to 2016





In the 1920s The average chicken would lay between **80-150 eggs per year.**



Backyard chickens, continuously subjected to disease, freezing or heat stress, predators, poisoning, and infighting had a precarious existence and a normal mortality rate of 40% per year. Average yearly egg production was little more than 100 eggs, of which many were contaminated by the microbes from poultry diseases. Today, in modern egg farming, the annual flock mortality is about 5% with each hen producing about 265 eggs per year.



Most commercial strains of hen can lay over 260 eggs per year and some improved breeds can lay over 300 eggs in a year - this is almost an egg every day.





# Arizona Sweet Corn

310,604 Cartons

15,530,200 lbs

7,765 Tons

\$4,350,000.00





**Arizona Romaine  
Lettuce  
\$305,000,000.00**



## 2015 Cash Receipts

**Broccoli Value  
\$52,000,000.00**



**Cauliflower Value  
\$54,100,000.00**



**Cabbage Value  
\$18,800,000.00**

## 2015 Cash Receipts



**Value of Cantaloupes  
in Arizona  
\$84,100,000.00**



**Value of Watermelons in  
Arizona  
\$26,600,000.00**





**Leaf Lettuce**  
**\$146,000,000.00**



**Head Lettuce**  
**\$254,000,000.00**



**Lemons and Tangerines**  
**\$156,000,000.00**







**Arizona Cotton Crop**  
**\$188,000,000.00**





**Arizona Hay Crop Value**  
**\$406,000,000.00**





**Pecans in Arizona**  
**\$54,000,000.00**



# All Other Crops in Arizona

**\$535,000,000.00**

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**Arizona Grain Crops Value**  
**\$168,000,000.00**





**Value of Hogs in  
Arizona  
\$40,000,000.00**

## Feeding A Hungry World

Former Senator George McGovern and Marshall Matz who both serve on the Board of the World Food Program wrote opinions in a Chicago Tribune story on January 4, 2009. To confirm their concern about feeding a hungry world, we will reference the following quotes:

Norman Borlaug, a Nobel Laureate and father of the Green Revolution, has concluded that the world will have to produce more food in the next 50 years than it has in the last 10,000.

“There is an important role for organic agriculture and, indeed, some consumers are willing to pay a premium for foods that are certified as organic. Commercial agriculture is still the backbone of the economy in most rural counties across the nation. We do not yet see the yields with organic agriculture that would feed a hungry planet of almost 7 billion people.”

“America’s farmers have become so efficient that 1% of the population can feed the entire country and much of the world. One of the downsides of this efficiency is that consumers have forgotten where our food comes from and what it takes to get our bounty into supermarkets.”

“We need to get beyond ideology and depend more on science. We need to develop a new understanding of agriculture based on our larger goals if we are to craft a long-term food and farm policy that works. Agriculture has a responsibility to adjust and contribute to improving the environment. But let’s stick to science and avoid an ideological debate about agricultural practices.”

We agree with McGovern and Matz. We must recognize that “organic” or free-range production is not sustainable and cannot replace the farming practice that currently produces the abundance of affordable, safe food to feed the world’s population that Dr. Borlaug envisions.

It is reported that there are nearly 1 billion hungry people around the globe. The U.N. projects the world’s population will reach 9+ billion by mid-century and has called for a 100 percent increase in world food production by 2050.

If the anti-animal agriculture agendas of the Humane Society of the United States (HSUS) and PETA are not stopped then we will see agriculture return to production practices that cannot feed the current population and certainly not the population Dr. Borlaug and the U.N. has estimated.



### Eggs:

Egg yolks are one of the few naturally occurring; significant dietary sources of vitamin D. A single egg provides all iron and half of the protein a child needs daily.



### Meat:

In addition to being a good source of high-quality protein, one serving of cooked beef provides 40% of the Daily Value for vitamin B12 and zinc, plus much of the recommended intake of bioavailable iron (heme iron).



### Milk:

Each serving of milk can supply substantial amounts of vitamin A, riboflavin, vitamin B12 and highly available calcium. Milk consumption may also help achieve and maintain a healthy body weight.

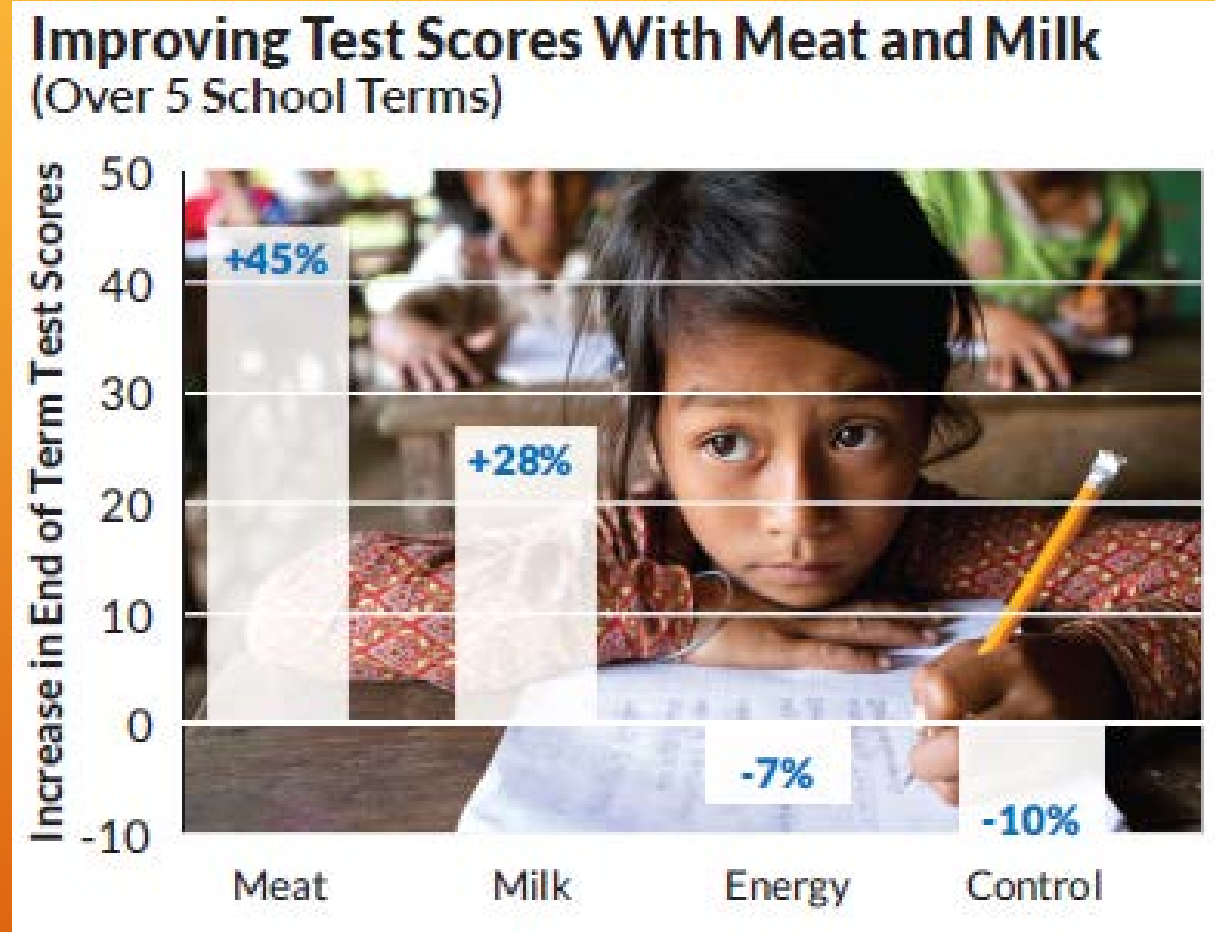


<http://www.sensibletable.com/feeding-9-billion.aspx#food-security-defined>

**Nutrition and academic performance:** it's not just about underperforming because of hunger.

**Quality of food counts as much:** Milk, meat, and cheese proteins provide the building blocks for the pathways our brain uses to work. Without the amino acids found in proteins, our brains cannot create the neurotransmitters, or chemical messengers, our brain cells use to communicate with each other.

# Animal-derived protein improves child cognitive function.

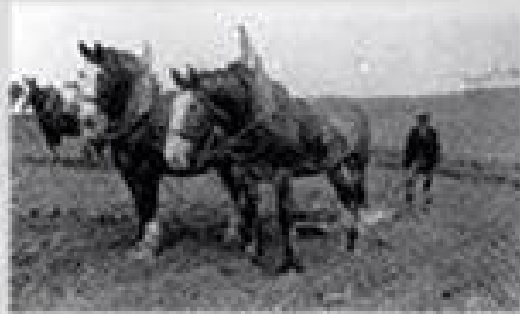


ugh-report

Nutritional Supplement  
Adapted from Hulett, J.L. 2010, UCLA



College of Agriculture and Life Sciences – Office of the Vice President and Dean.  
The University of Arizona, Tucson, Arizona



In **1920**  
Each Farmer fed  
**19** mouths



In **1970**  
Each Farmer fed  
**26** mouths



In **2013**  
Each Farmer feeds  
**155** mouths  
And counting...

**No Farms, No Food, No Future**





Today's  
farmers  
produce 262%  
more food  
with 2% fewer  
inputs  
compared  
with 1950.



**DID YOU KNOW ARIZONA USES AS MUCH WATER AS WE DID IN 1957 - 6 TIMES MORE PEOPLE AND THE SAME AMOUNT OF WATER THANKS TO URBAN AND RURAL CONSERVATION EFFORTS!**







# LOOKING FOR SOLUTIONS TO SOLVE OUR WATER CHALLENGES



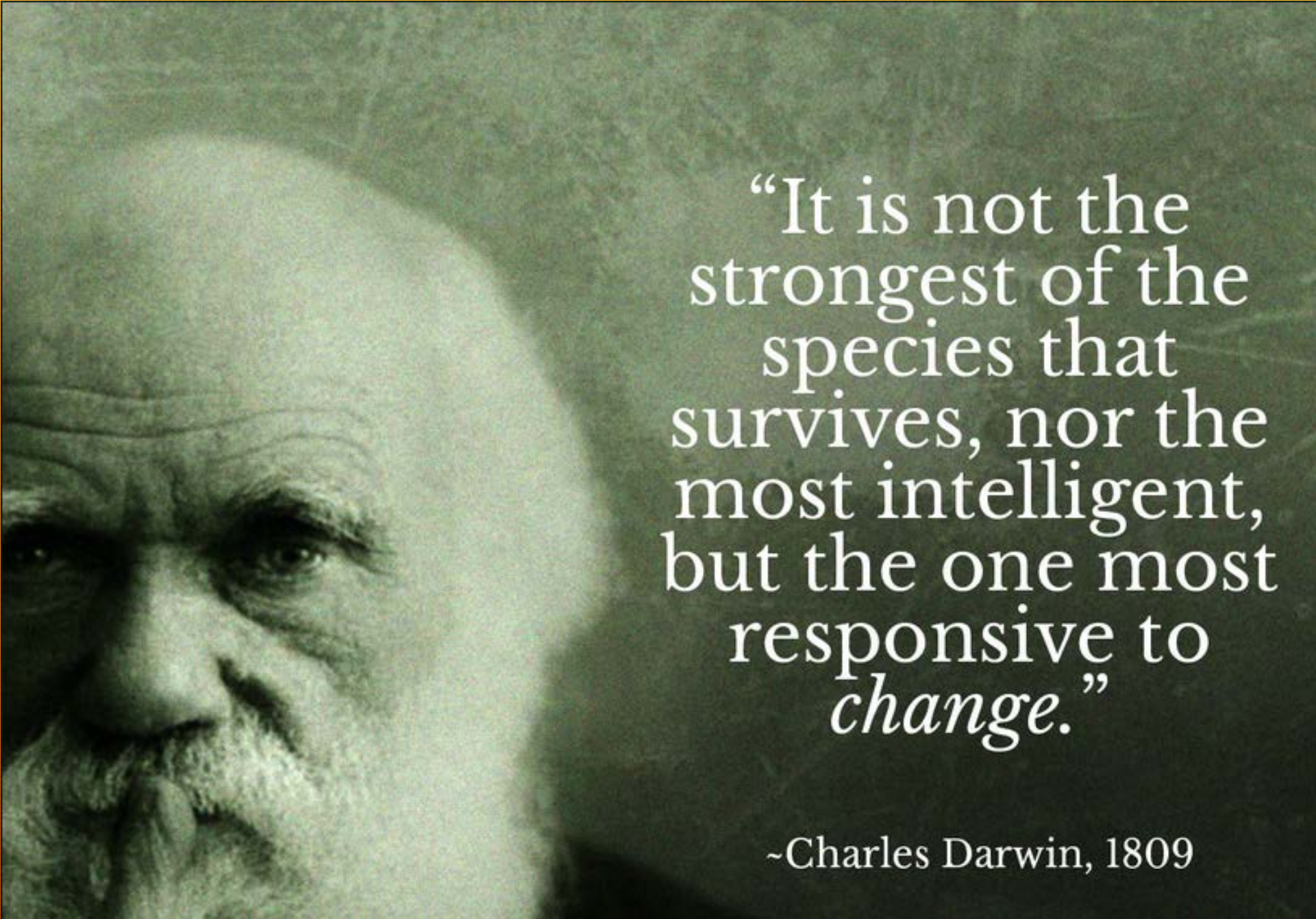












“It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to *change*.”

~Charles Darwin, 1809



**PETER DRUCKER**

1. Trying to predict the future is like trying to drive down a country road at night with no lights while looking out the back window.
2. The best way to predict the future is to create it.