

# AUTOBIOGRAPHY OF J.D., HIS RESEARCH AND RETIREMENT

By  
J. D. Bilbro Ph.D.

## CHAPTER 1

### Introduction

This little discourse was written by J. D. Bilbro, Jr. for the benefit of his children and their descendents. It is written in the “third person” as I would get tired of seeing the “I”. The story is perhaps a little boring but I wanted it to be in sufficient detail.

This paper is about J. D.’s parentage, his education, his life as an Agricultural Scientist, his jobs after retirement, and his life after losing his wife to cancer.

He is the only one who has edited this paper. So please overlook any errors and just keep on reading!

J. D. believes the value of this document is that his descendents can read it and be proud of him for his scientific accomplishments; and therefore they should have higher confidence in themselves because they are related to him.

He thanks the Lord for the mixture of his genes with those of his wife, Mary Alice, because the mixture produced some very intelligent children, grandchildren, and a great-great grand child.

Now for J. D.’s story—and I hope you like it!

## CHAPTER 2

### His Birth and Other Family Information

J. D.'s father, James DeLaMatyr Bilbro (Jim), and his mother, Lillie Alice Marvel Harrison Bilbro got married in August of 1926 in Forgan, Oklahoma. Then Lillie Alice gave birth to three children: Joyce, April 5, 1927; J. D., August 5, 1930; and Lillie Anne, May 31, 1933.

His mother was almost 39 years old, and his father was almost 50 years old at the time of J. D.'s birth. They both had children from previous marriages.

### Lillie Alice Bilbro

At the time of her marriage to Jim, Lillie was employed as a telephone operator and as a part-time waitress in a local café. Jim was farming one-half section of land about two miles southwest of Forgan. He owned one quarter of the half section, and his cousin, Sam Humphery, owned the other quarter section but Jim farmed it; Sam lived in Wichita, Kansas and worked for a railroad.

Jim built a house about the center of his quarter section while his first wife, Beulah, was still living; she died in 1924 shortly after giving birth to their last child, Maxine.

Jim lived in that house until 1949, and then he and his second wife, Lillie Alice, moved into Forgan. Jim died of a stroke at home in Forgan in 1959. Lillie Alice passed away in a nursing home in Beaver, Oklahoma in 1986. Beaver is seven miles south of Forgan.

### Early Life and Schooling

As mentioned above, he was born on August 5th, 1930. He was a very bright boy and started to school in September just after he had turned five years of age on August 5, 1935. The reason for this "early starting" was that in 1935 there were several children starting to school, but there would not be any starting in 1936.

J. D. went through grade school and high school making mostly A's and B's. Then after he graduated from high school he was persuaded by his mother to start to college at Panhandle A & M at Goodwell, Oklahoma, 70 miles west of Forgan.

He was not interested in college and in the first semester he made B's, C's, and one D. At the end of the first semester in January, he took his entire belongings home. His mother persuaded him to go back for the second semester, and his grades were about the same as those of his first semester.

He had two roommates that were in his high school graduating class of 1947, and they made grades in college similar to those of J. D. One of them dropped out after the first year, and the other one dropped out after the first semester of the second year. Both of them went to work on a pipeline, and ironically, both of them were killed in pipeline accidents.

The second semester of the second year J. D. decided he was in college to get an education, and his grades improved significantly and continued to improve. He graduated in 1951 as fourth in a class of sixty two boys.

In his senior year he fell in love with a cute, and very brilliant, little freshman girl, Mary Alice Grossman (born 3-20-1932), and he married her on August 25, 1951.

### College Careers

J. D. and Mary Alice enrolled in college at Oklahoma A & M at Stillwater in September of 1951. J. D. started working on his Master of Science degree, and Mary Alice continued her work toward a Bachelor of Arts degree. But after one year she ceased her schooling and started a family; and the first three children in the family were born in Stillwater: Charlotte Anne was born December 20, 1952; Mary Alice was born February 10, 1954; and James Walter was born June 20, 1956.

J. D. got his Master's degree in Agricultural Science in 1953. Then he got a fellowship and started working for a Ph.D. degree in Crop Science. He got the degree in absentia in May 1957.

He, Mary Alice, and their three kids, moved to Lubbock, Texas, in April 1957, and J. D. began working with cotton for the USDA Agricultural Research Service. And Joe Edwin was born in Lubbock, Texas, on June 4, 1959.

### Research at Lubbock, Texas

J. D. spent his first two years working as a cotton breeder, and then he was switched to Crop Climate Investigations. His job was to find the relationship of cotton yields to air temperatures, soil moisture (irrigation), dates of planting, variety types, and soil types. The field tests were conducted at Brownfield, Lubbock, and Plainview for two years. Then the data were analyzed and the results printed in a publication.

Then he began working in cooperation with the USDA Agricultural Engineers and the USDA Plant Physiologist who were located with him at the new Texas A & M Agricultural Experiment Station just north of the airport of Lubbock.

In cooperation with the Engineers and the Plant Physiologist, experiments were conducted on factors influencing the lint yield and quality of cotton. These factors were the following: dates of planting, seed planting depth, soil types, irrigation timing and amounts; and the effects of seeding depth on seedling emergence and growth.

In addition, he worked with the Plant Physiologist on the effects of the age of cotton bolls at time of harvest on the germination of seeds from those bolls.

## Furrow Diking

J. D. also introduced furrow diking as a method of increasing crop yields and reducing soil and wind erosion. The value of furrow diking spread quickly and several types of dikers were researched. Finally a very simple, effective diker was invented by a machinist at Lamesa.

Presently dikers are used on over two million acres of cotton on the High Plains alone. Furrow diking is also used in many places other than the High Plains of Texas because it is very effective in preventing soil erosion from rain and wind as well as increasing cotton lint yields.

The benefits of furrow diking on both dryland and irrigated fields can range up to twenty five percent increases of cotton yields. This means millions of dollars in the annual income of farmers wherever it is used.

## CHAPTER 3

### Preaching, ministering career, hyperacusis, and research

In 1974 J. D. received the baptism of the Holy Spirit. He then became a student at the “Holiness Church” and received training on becoming a licensed pastor.

He was a member of a Christian Church and was given the privilege of filling in for pastors all over the High Plains. (The teaching and preaching did not interfere with his job for the Department of Agriculture.)

In 1975 he took the job of teaching and preaching at Spur, Texas, on Sunday mornings. He was pastor there for about three and one-half years. And during that time he led three people to the Lord, baptized them, and welcomed them into the Church. He also conducted one marriage service there, and funeral services for two Church members.

His wife, Mary Alice, led the singing for the Sunday services and J. D. played the piano. Mary Alice also sang a solo each Sunday.

When J. D. and Mary Alice started ministering at Spur they still lived at Lubbock. But in 1981 J. D. got transferred to the USDA Experiment Station at Big Spring, Texas. But he and Mary Alice continued to go to Spur until J. D. resigned in 1983.

J. D. became associate pastor at the First Church of the Nazarene in Big Spring about 1990.

J. D. retired from the USDA on January 1, 1999.

In 2001 J. D. got exposed to a burglar alarm while house-sitting for a friend. It made him extremely sensitive to sound; so he got hearing aids to better control surrounding sounds. Then on July 3, 2002 the Bilbros moved back to Lubbock.

### Research at Big Spring, Texas

In 1975 J. D. was transferred to the USDA Agricultural Research Station at Big Spring, Texas. His projects were: Evaluating “new” crops such as Kenaf and various grass species; evaluating various crops for wind erosion control; evaluating the effects of plant spacing in windbreaks on upwind and downwind velocities; evaluating the effect of irrigation rates, dates, and fertilizer amounts on plant development, and on lint yields.

He evaluated the resistance of various plant types to lodging (falling over) during the winter. He also developed equations to express the effects of artificial windbarriers on upwind and downwind wind velocities. Such equations would be useful in designing artificial windbarriers for controlling distribution of snow next to roadways.

J. D. also introduced a way to significantly reduce wind and water erosion in furrows to protect the soil in the winter time, and then allow a crop to be planted on top of the beds in the following spring.

An example; A spring crop, such as spring barley, is planted in the fall in two rows eight inches apart in the bottom of the furrows. The barley will produce sturdy plants by the first of winter, then head out in early January and die. The heads are sterile so there is no problem of volunteer plants.

In the spring the desired cash crop is planted on top of the beds and the residue of the spring barley protects the seedlings of the planted cash crop until they are large enough to control wind and water erosion.

He also found that certain spring forage crops, planted in the fall and killed by the first frost would work very well for controlling wind erosion during the winter and protecting seedlings of the crops planted the following spring.

Inspired by his research work, farmers discovered that planting winter wheat in the bottom of the furrows would also control the wind and water erosion in the field during the winter.

When farmers plant wheat in the furrows they will have two options as soon as the wheat plants are established. They can graze cattle on the wheat up to the time it is beginning to “joint” (produce invisible heads). Then they can take the cattle off the wheat and allow it to make a grain crop they can harvest. Or in some years the price and demand for baled wheat is such that the farmer will bale and sell the wheat plants instead of harvesting the grain.

### Speeches and Publications

J. D. was required to give at least one speech per year at some national or international meeting. Fortunately, he was allowed to take his beloved wife with him, but the government would only pay his expenses

He gave speeches in a wide range of places. He gave speeches from as far south as San Antonio, Texas, to a Canadian City on the north. (He doesn't remember the city's name.) He also gave speeches in Tennessee, Nebraska, Colorado, Oregon, New Mexico, Kansas, Missouri, Oklahoma, and Canada.

He published several scientific articles in publications that are distributed in the United States and over seas. Consequently he has had many requests for his publications from people all over the world. Also, he had the privilege of “tutoring” scientists from several foreign countries. Some stayed only a short time, and others stayed about a year.

## CHAPTER 4

### Retirement

J. D. retired at Big Spring in January of 1999. Then he and Mary Alice moved back to Lubbock on July 3rd, 2002, and settled in a home on 8220 Flint Avenue. The house had been vacant for about twelve months, so the yard and house needed a lot of work done on them.

He worked on the yard to get the scarce Bermuda grass growing until it completely covered the soil in the yard. He did a lot of other jobs improving the looks of the yard and the outside of the house. He also had a sprinkler system installed; and the water and some fertilizer enabled him to keep the grass growing and looking healthy.

In September of 2003 he had a heart attack and had to have three stents installed in the main artery of the heart. He recovered completely, praise the Lord, and went back to working around the house, and in it.

Finally, he got everything in the yard and house well taken care of and he “retired” again. However, he was not satisfied with all the “doing nothing” time on his hands, so he applied for a job as a free-lance reporter for the local newspaper, the Avalanche Journal.

He got the job and kept it for about three years; then the AJ ran out of money for free-lance reporters. But fortunately he immediately got a job free-lance reporting for the Southwest Farm Press located at Denton Texas. He kept the job for about three and a half years; then he retired again.

### Death of His Wife

In 2010 Mary Alice became ill in January, and was finally diagnosed as having cancer. She died in Lubbock, Texas, September 21, 2010.

During the three years of retirement and batching after his wife’s death, he had a serious attack of Vertigo, evidently caused by a virus which destroyed 82% of his left inner ear; and this caused him to fall for no apparent reason. So he underwent six months of Physical Therapy treatment which eventually enabled him to walk safely with a four-wheel walker.

### Raider Ranch Assisted Living

Then after three years of “batching,” Joe and Elizabeth, his son and daughter-in-law, helped him get into the Raider Ranch Assisted Living facility.

Once he got his medication corrected, he overcame his depression and self pity, and began taking part in various activities.

However, he has had two or three falls in his room, and one of them was serious enough that he was put into the hospital for a few days.

Then after another fall they wanted to put him in the hospital again, but Joe talked them out of it. And the first night after J. D.'s fall, Joe slept on blankets on the floor just in case his father might need some "Muscular" help during the night.

He is very careful now, and thanks to the Lord, he hasn't had a serious fall since then.

### Becoming Adjusted

J. D. has become well known by the people at Raider Ranch because he has been asked to pray in the Church, dining room, and at various activities in which most of the residents were participating; he is now managing the theater and showing a movie at two p.m. every Sunday.

And fortunately for J. D., Joe and Elizabeth live only one and a half miles from there. They take care of **all** of his needs and he is now very content with life. Thank you, Lord, for Joe and Elizabeth!

J. D. also has a little lady friend who is very intelligent and well educated. She edits most of his writings, but she sweetly refuses any payment.

So far his writings have ranged in number of pages from six to over two hundred. They are mostly fiction but some have actual experiences in them.

### AFTER WORD

At the time of this writing, February 1, 2017, J. D. is eighty six years old and in good health, according to his doctor. He is still living at the Raider Ranch facility and enjoying it very much.

He is in no hurry to leave this old world as long as he has good health, physically and mentally, and as long as the Lord can use him.

Now to each and every one who might read this essay sometime: May the Lord bless and keep you, and may your years on this earth be joyful!