## **Bill Best**

## Preserving Diversity in Germplasm and on a Jackson County Farm Near Berea, Kentucky

Throughout eastern Kentucky and the United States, reaching out to England, France, Germany, the Netherlands, Canada, Poland, and particularly New Zealand and Australia people know about Bill Best. Particularly the Cherokee nation whom are recovering many of their native seeds from Bills collection, recovering their own history seed by seed. At 80 years old, Bill has spent his life growing vegetables of all kinds from beans, to corn, tomatoes, potatoes and others. In fact, his first and most fond memory is picking beans with his mother at two and a half years old. Today, his great grandchildren help him sell produce at the farmer's market.

Driving up to Bills house we're nestled into a deep, wide, rolling valley that shoots steeply upwards along its edges to the tall rounded knobs that Kentucky is known for. The driveway leading to Bills house is dotted with long greenhouses filled with tomatoes, matching light and dark brown buildings and tucked into the back sits a spacious A-frame house. Walking up to the door, the stone patio and adjacent stone chimney are adorned with geodes, smooth river stone and fossils that we later discover were all found on this same property, going up the long slope to the knob that overshadows the home.

We've arrived to our interview early and Bill soon arrives in a dark blue Prius, he's dressed in clean slacks and a polo. After excusing himself to change, we wait for him in the breezy morning air, unhurried in the tranquility of rural Kentucky. After a time, Bill returns having changed into well-worn blue jean overalls, clean t-shirt and baseball cap. Sitting down on the stone bench built into his patio, he takes a deep breath to prepare himself for our talk, we're clearly not the first people to ask for his opinions. He looks at me, then off into the distance as we ask him questions, closing his eyes sometime as he recovers names, places, dates- all the fine details from his past. His pale blue eyes are set into the deep lines of his face, they're cloudy with age and sun exposure, yet below there lies an intensity, an unquenchable resolve that he shares through his stories.

Bill began making a name for himself as a farmer in 1951 by setting a new record to become the North Carolina Corn Champion. He set this new record at the age of fifteen by producing 18 more bushels than the last record setter and held that spot for 19 years. He was taught to farm by his Mother and Father whom were both excellent growers. His father who attained a 7<sup>th</sup> grade education was very scientific, taking notes and testing new ideas all the time. His mother a high school graduate was, "more traditional", than his father, taking ideas and practices that she had learned from others rather than testing every practice herself. Bill ended up following his mother's practices more than his father's saying that his father's methods were, "only as good as they went". It was from his mother that Bill learned to save seeds, to look out for mutated plants and grow them next season to test out their genetics.

Though he leaned on his mother's farming practices, perhaps it is his father that shines through in Bill innovative approach to life. An unquestionably unique man, he confesses that he is both blessed and cursed by chronic multiple interests. Though vegetables have remained a constant in his life, he spent 40 years teaching all kinds of classes at the local Berea College. From modern dance which is his master's degree, to biology and sociology. An avid woodworker with his son, he designed and built his beautiful

A-Frame home and multiple outbuildings for storage, a professional grade wood shop, and even housing for interns of the farm. Near to the woodshop there is even a portable sawmill and Virginia Tech Solar Dryer which he uses regularly with his grandson to process and dry timber from their own land to build houses and unique furniture.

So what is Bill Best "best" known for given his varied interest? His beans, of course. With over 700 varieties in a chest freezer meticulously labeled and stored with the help of his wife Betty (?), they've been on a mission to restore the heirloom bean with its rich genetics to Kentucky and the world. Many of his beans were grown in the region by native American 1000's of years ago and Bill contends that, "if they were good enough for the Indians then, they're good enough for us now" with their high nutrition and regional adaptations it's probable that he's right. His life's mission to restore genetic diversity to our seed supply started early and has developed since the year 1963.

It all started when he planted his first garden away from home. After living in dorms around the university during his early employment at Berea college in 63′, he and his wife Betty (?) purchased some land and a home just out of town in Jackson County. As Bill recalls, they went to the farm supply store and purchased a variety of conventional corn, okra, potatoes, tomatoes and Blue Lake green beans. Unaware how much agriculture had changed by then, Bill expected average to good results from all the varieties they purchased. All were indeed satisfactory except for the green beans that he had purchased which were hard and without much flavor. He shared the problem with his mother over Thanksgiving that fall and she gave him her own heirloom seeds from the deep freezer.

Bills mother like many women of her generation and those before was the primary care taker of the garden, particularly saving seeds and selecting for certain attributes. According to Bill, it's not uncommon to find heirloom seeds named after women, "Aunt Bessie's Beans"," Margie's Tomato", and so on. The seeds Bill received from his mother changed his whole perspective as a farmer to growing food to please himself before anyone else. It was clear to Bill that the beans from his youth were far superior to the commercial varieties like the Blue Lake, meant to be machine harvested and picked before the vital proteins and micro-nutrients develop.

He is adamant about the nutrition derived from a fully developed bean. The unique flavor and texture of regional favorites including the Greasy Bean far surpass the increasingly common Tough Half Runner's and Blue Lake's that have begun to be labeled as heirlooms because of their age rather than their lineage. To Bill, mislabeling a bean with minimal nutritional value that's intended for harvest by machine as an heirloom is nothing short of, "Sacrilegious". It simply doesn't meet the requirements of a carefully chosen plant, picked by a watchful eye and carried like a family treasure to nurture future generations. To Bill, the appearance or flavor of any fruit is tertiary to the nutrition and health to be gained from eating it.

With some exasperation, Bill recounts a story to explain his strong position. It is the story of an agricultural conference he attended when Berea college hired a new president. The new president, unfamiliar with agriculture, took advice from around the world about how to run the regional Berea Agriculture program. On the last day a banquet was held where Bill recalls some peculiar green beans he attempted to eat. Nearly neon green, impossible to cut even with a knife and without flavor, Bill noticed that no one else had eaten their green beans either. An avid bean grower himself he was naturally unhappy and puzzled about why the college would purchase such inedible beans. It wasn't until years

later as Bill was presented the Keeper of the Flame Award from the Southern Foodway's Alliance<sup>1</sup> that he shared his story again of the green beans. He was quickly met with laughter from a group of professional chefs. They explained to him that green beans are considered a garnish rather than a nutritional food to eat. Since then it has been Bill's life mission to create an antidote to the protein free garnishment green bean, the lycopene and vitamin free tomato and the single seed solutions manufactured by companies like Monsanto.

It is a long mission, refined over the years, season after season, market change after market change. Bill recounts another occasion that helped shape his opinions, for better or worse.

When Bill began farming for profit he grew primarily Camel 1327 tomatoes to sell to the local distributor. As they ripened he brought one in to the purchaser red, vine ripened, rich with flavor. The purchaser loved it requesting eagerly that Bill bring these same tomatoes next week. As Bill brought more pallets in as requested, Bill remembers it was the first time anyone in a professional role had ever cursed at him. Infuriated with Bill for bringing red tomatoes, he had expected Bill to bring him a green tomato that could be gassed when they were ready to be purchased, the "ship green tomato" of our modern age. Since that interaction Bill says he's never sold a green tomato for shipping. He chose instead to focus on vine ripened, flavorful tomatoes to sell to local restaurants and markets.

After being dismissed by the produce purchaser, he was able to find a cooperative in Monticello that would purchase his vine ripened tomatoes. Selling for .15 - .16 cents a pound, it wasn't a great money maker but with 13,000 tomato plants in the ground, he had to sell in bulk to someone. Today, he makes an average of \$2.50 per lb. for his tomatoes which makes possible the giant high tunnels around his property that cost approximately \$5,000 each. Additionally, he simply isn't growing as many tomatoes as he used to and must charge a higher margin for his high quality produce. During the time he sold to the cooperative he had to supplement the low per lbs. value. To do this, Bill started the Berea farmers market 30 years ago and helped start the Lexington market soon after. Bill ran the Berea market for 30 years, now it's run by a group while Bill remains involved as a seller. As for the Lexington market, he is the last surviving member of the original group.

He is notorious for starting things, including a farm run by Berea college students during his days teaching. They grew sweet corn, tomatoes and potatoes and sold off the side of the road and to the local cooperative in Monticello that was purchasing Bills tomatoes. According to Bill, the students that worked did very well for themselves. Before that time, unlike all the other professional programs at Berea, there was no work study opportunity for agricultural students. Bill changed that by working with the college to acquire some farm and a produce stand on the campus.

Though the college farm was profitable, and Bill's tomatoes were still selling at the Monticello Cooperative, things were changing. His children moved out, they sold the cattle they had, he attained his masters in Modern Dance, Doctorate in Appalachian Studies, a Bachelors in Biology and naturally his circle of influence was changing. It was during this time that beans became increasingly important in Bill's life. As he talked to more people at farmer's markets, sharing the small surpluses from his own garden, people really liked what he was growing. They also liked his mission of preserving and spreading the seeds across the country, they were sharing his resolve. Bill became known for his seeds, giving talks over the years in several states including Ohio, Virginia, Indiana and of course Kentucky which hosts an

<sup>&</sup>lt;sup>1</sup> Insert website for SFA

annual seed swap drawing 200-300 people from as far away as California. Perhaps Bill didn't start the seed swap, but he has remained the foremost advocate for Kentucky's most precious beans.

Bill then reminds us that he was at least 10 years ahead of the Seed Savers Exchange, a popular heirloom seed swapping group. He also explains that he isn't part of the group, anymore. Not since people took his seeds and began re-naming them and changing their stories. To Bill, the stories are half the value of the seed, understanding where it came from, what its conditions were, who saw the new plant and chose to save its seeds? It's so important to him that he's written a book telling the stories of as many seeds as he could and has plans to release another next year. Unfortunately, some of Bills seeds have lost their stories as people pressed small jars of seeds into his hands, leaving before Bill could ask for details. Now, those seeds are simply named, "Blue Lid Bottle", or, "Green Lid Bottle" with a date.

Perhaps one of the more important stories that Bill keeps is that of the native bean, to the Native American. His own story with Native Americans is long and develops over time as trust was built between communities. Unfortunately, his story begins much like all his other stories, with an acutely sour start that only increased the resolve of his life's mission to transform modern agriculture.

While attending an Appalachian studies conference, Bill attended a seminar on the Cherokee and was intrigued by what they were doing and their history of farming. Soon, Bill went to the extension office covering the Cherokee territory to ask about finding people in the community who had heirloom seeds. Again, Bill was laughed at and told that Extension was trying to, "Get rid of that stuff", in favor of the more modern, machine harvested, nutrient empty Blue Lakes. Over the years Bill says, "The Cherokee started contacting me for their seeds." They were searching for something better than the commercial varieties they were sold. Since that fateful day Bill and the Cherokee have become closer, sharing their seeds as well as their struggles and successes. In particular, they share a growing commitment to health through nutritious food to overcome social epidemics like diabetes or obesity which plague many reservation communities. Often without much access to fresh fruit or vegetables from markets, local production of nutrient dense food is the most reasonable option for most. In doing so, both the Cherokee nation and Bill's Chippewa neighbors practice the three sister's method so strongly tied to Native American traditional farming. No matter what variety of corn, bean and squash used, the three "sisters" each play a crucial role in nurturing and supporting one another. The corn acts as the pole for the green beans which feed nitrogen into the soil for the corn. Meanwhile the third sister, squash, grows broad leaves that shade out weeds and keep the soil cool and moist. They're Feeding the soil while feeding themselves. Growing new varieties by isolating new genetics and reproducing the seed to send back to Bill, because as he put it, "They're into it pretty big time". Bill also reminds us that beans are one plant that will likely never be fully tamed by scientists because it's so prone to mutation. In fact, one of his most popular beans is the mutant bean that they still grow today!

Today he's receiving varieties back after so many years of offering his own. He'll likely keep exchanging seeds until the day he passes because it's even more important to him now than ever before. The modern beans are still popular enough that people will buy them even if half of them are inedible. Bill recounts a woman he knew that used to purchase 12 bushels of the modern half runner for canning every year. Sure enough, every year she would discard 7 of those bushels as waste. Finally, she decided she would pay double the price for the Greasy Bean, so popular in the region and didn't have to throw away any. To Bill, this is the root of the solution, realizing how much waste is involved in the modern protein free bean. Once it's apparent, it makes more and more sense to grow the labor intensive, flavor

and nutrient rich heirloom varieties. Economically the commercial Blue Lake beans sell for a mere \$7.00 per lb. where the heirloom varieties can sell for up to 10 times as much! Remembering these stories, Bill is understandably discouraged as he sees people being manipulated by big business at every level of the food system including communities as remote as the Mennonites who seem impervious to modernization. On the contrary, their leadership has adopted the same protein free beans and lycopene free tomatoes as the biggest commercial growers around. Bill recounts a story from a visit to a local Mennonite farm supply store where he buys most all of his supplies like drip tape and plastic row cover. Nearly 15 years ago while waiting for his truck to be loaded he struck up a conversation with a Mennonite woman ahead of him. As they talked, he broached the subject of the genetically modified seeds that she was purchasing. Bill wondered if she felt like the genetic modification interfered with her theology. She replied that she felt it was a problem but unfortunately her theology is based on what her leaders say on any given day and they say what seeds she buys too. In another case, a local Mennonite farmer owns a new John Deer tractor but runs it on steel tires because rubber is against their theology. This is an overarching problem to Bill. His personal opinion is that the Amish and Mennonite have two main goals in life, community control and making money, both of which they've proven very good at. What their community control does though is stop the cycle of the heirloom. It prohibits people from carefully selecting, choosing and propagating new varieties to share with each other.

For this reason, Bills is always happy to receive new seeds, he will save them and someday grow them to renew the seed and share them again. We asked him about seed saving methods, what does he do? How much success does he have in germination? His answers were simple and surprising. To save the seeds, he says to simply dry them, clean out the shell, brush off the debris and freeze them immediately. As for his germination rate, he's had 100% success from some of his mother's seeds after 35 years in a deep freeze. When he's ready to plant his beans, Bill has more advice that is similarly simple and surprising. When he plants his beans, he always plants two at a time because he "doesn't want them to break their backs or necks", suggesting that the beans help each other break through the ground. He says too that if conditions are wet, sometimes he just lays the seed on the ground, the roots extending into the soil while leaves emerge skyward.

With a grim expression, Bill reminds us to never blindly trust the plating instructions provided by seed companies as, "they're in the businesses of selling seeds, not growing food". He reminds us the necessity to pass knowledge generationally, whether its instructions on how to plant, save seed, or when to harvest. Once a generation has been skipped it's remarkably difficult to re-educate. Even then, our educational systems often fall short of what our parents or grandparents might have taught.

For instance, Bill rarely hires interns with an agricultural background because they often have too much to unlearn. Taught to use commercial processes they don't want to learn the methods Bill has been developing for decades. They're similarly disinterested in the stories and the history wrapped up in heirloom seeds. So instead, he hires lots of liberal arts students. In fact, the intern that we meet during our interview is pursuing an English degree at Berea. Only once has Bill been happy with an Ag student, a young man whose family is from Mexico had an excellent work ethic and listened to Bill without questioning or changing anything. Eventually Bill put him in charge of what was then the largest high tunnel in production.

It's perhaps unfortunate that more Ag students aren't interested in what Bill has to teach given his success in helping small scale farmers to make a living. Bill mentions at least two of his previous interns

both making a living on 1 - 1 ½ acres thanks to the Sustainable Mountain Agriculture program. Started 15 years ago by Bill, his son, and several Berea and Kentucky University graduates, the program is designed to help people make a living on a small acreage. Moreover, it's another antidote to the modern day temptation to "pinhook". Pinhooking is the purchasing of bulk foods from produce auctions and reselling at inflated rates to farmer's markets. Former interns are illustrating that others can make a living from farming even if they don't have much land. They're illustrating an alternative to an all-too-common practice. Pinhooking is one reason Bill is so excited about the Chattanooga, TN farmers market which requires sellers to either make or grow whatever they're selling. Unlike the Lexington Market that, of 80 members, only an approximate half dozen will have grown their own produce.

Given the rise in pinhooking, Bill is all for direct marketing vegetables to restaurant or markets that appreciate the grower. This has been reliable for him; one restaurant has been purchasing his tomatoes for 40 years. Indeed, farmer's markets and restaurants are his only outlets and he does well at both. He is well known for his tomatoes in the community and people have come to expect his products. In fact, recently at the market in Chattanooga, he and his son sold \$3,750.00 worth of tomatoes alone.

The quality of his produce is derived from the quality of his process which he's been refining for nearly 80 years. Bill isn't the only one who's been toiling away though. His number one tomato is called the Vincent Watts tomato because it was grown by his friend Vincent Watts for 52 summers. Vincent selected for flavor, texture and disease resistance and according to Bill, he did pretty well. Bills adoption of Vincent's tomato is an example of his willingness to do what works rather than what's traditional to one person or another.

Bill used to have his 10-year-old neighbor plow the fields. The boy would use his small horse and it saved Bill the trouble of running a tractor or doing it himself. As the years passed the boy grew up to become a local minister and naturally he wasn't tilling Bill's fields anymore. They stopped using horses when the boy stopped coming because Bill isn't dead set on using old methods for the sake of keeping them around. This is in large part why they began using high tunnels, drip tubes, or plastic mulch along their rows.

Bill began using the drip tape when it first came out in the mid 1980's and started using both drip tape and high tunnels because of the research that Bill had read about them. People suggested they were useful in growing vegetables and Bill was willing to take the risk. Since that time Bill has expanded to four only one piece of advice for people who are interested, "Don't use gutters in a snowy climate." Recently Bill lost his largest high tunnel due to snow gathering in the gutters along the length that tore the structure down. A sizable economic loss, it hasn't convinced him to stop using the high tunnels, just to stop using guttering on them.

His high tunnels and a small greenhouse where he starts all his seeds are heated by an outdoor wood furnace that pumps hot water into the spaces over the winter. He used to have the woodstove indoors, but found it to be too smoky in the same room he was sprouting seeds.

As we walk into one of the high tunnels, we see the plants are already mature, tomatoes ripening daily of Vincent Watts, Cherokee Purple and Yellow Germans. Some are a light pink, others more orange and plenty are still green. The tomatoes are all grown in high tunnels. Planted directly into the soil, he uses what's called the Florida weave to keep them off the ground. With tall, 8 foot stakes that he and his interns use to string tomato twine, weaving the twine between the poles with tomato vines nestled

within the weave. We notice a small concentration of aphids and their eggs on some of the plants. He tells us he has been using ladybugs from Arbico Organics and they've been working really well. Though, now he wishes he had kept a few more back after releasing upwards of 500 at a time. A few rows down are some cherry tomatoes about to ripen all at once. Though he doesn't normally grow cherry tomatoes, he's growing some Sungold because his son brought him starts to try and they seem to be doing extraordinarily well. Up to now he had been using Miracle Grow to fertilize through his drip tape system. He uses it mostly because its locally available and easy to find. As he inspects the leaves more closely, he's pretty sure there is something else he needs in the soil, affirming he would test the soil in the fall and add some aged horse manure that is sitting on his property.

Horse manure is easy to come by in Kentucky, and an easy fertilizer for any farmer. Luckily, most of his crops don't require much fertilization, his beans of course. Because they generate so much nitrogen in the soil, he has never had to fertilizer but remarks that he would if the soil begins to need it. He also benefits from the mineral rich knobs that surround his valley. As rains wash down the long slopes they pick up minerals and other nutrients for his field crops and the cover crops of rye that lie where he used to grow so many tomatoes years ago.

Interestingly over the years he has never had a disease or deer problem with his bean crop, only with his Navajo Blackberries which were overcome by the Japanese Beatles. Even with his treatments of Pyrethrum, an extract from the Chrysanthemum Daisy, he eventually chose to remove the bushes. The other problem that Bill is having since last season was an outbreak of bacterial wilt, the first case to be reported in Kentucky. He isn't sure where it came from, but it caused him to lose a whole high tunnel worth of tomatoes last season. According to Bill, the plants will look fine then collapse overnight, wilted, and his water lines will be clogged with bacterial growth.

It's unclear why he's had such success with beans. Perhaps it's the minerals in his soil that generate vital, strong, disease resistant bean plants. Perhaps it's his love of beans. Bill accounts his success with beans to having well-spaced plants with plenty of room for air to move through them. His method is to plant two beans every 12 inches between two large fence posts at each end of the row. Then, he strings a heavy gauge wire taut across the top and bottom. Then, he uses tomato twine and beginning at the bottom wire looping the string up and down for three passes, then ties a simple knot around the wire. This small knot makes all the difference in the longevity of his twine. As the string is anchored at regular intervals, even if one section breaks, the others will remain holding the beans. His string method is one that has proven itself to be most effective over the years as he's tried different styles. This includes a method he saw from a man in Mexico who managed to use three strings at a time, wrapping them from a single spool. This time saving method fell short was the lack of knots. Though the string went up quickly, it didn't hold up over time.

Today Bill grows the beans to eat as well as for his extensive collection that boasts 700 different varieties of beans. He's not the only bean seed collector though. One man has gathered 400 varieties (56 from one county alone), while another has gathered over 200. With this wealth of genetic diversity, Bill wants to make sure that they're kept in perpetuity beyond his own lifespan. To do this he is working to form a partnership with Tennessee Tech but not under the umbrella of the Agriculture department. Bill would prefer the seeds go to the anthropology or archaeology department because it's not just seeds, Bill is trusting the University with the seeds stories as well. To Bill, "every seed has a story", and

he feels that if we don't tell the stories, we lose something. Particularly future generations who rely on their teachers to tell them about their history, their region and the food varieties that developed there.

Fortunately, his son, who works at Tennessee Tech in the Ag Economics department is helping connect Bill to the university. His son has helped with a lot of Bills work over the years. Starting as a farm hand, his son now grows tomatoes extensively for the university and manages 2000 acres of cattle and 600 of pork. He and his wife also live on the farm with Bill, they live in a house Bill had built for an aging friend years before. Near to the house is the woodshop which Bill and his son have used extensively in the past as well as a small shop where he makes biodiesel.

Bill is aging and his son is working 50 hours a week so neither of them are using the wood shop like they would hope to. That doesn't detract from the fact that the woodshop is of a professional quality though, where they can produce most things on their own. Hooked up to a vacuum system that removes most of the sawdust, the shop is filled with presses, lathes, planers and unidentified large equipment. Most of this equipment belongs to Bill, but it is all under the umbrella of the Sustainable Mountain Agriculture Center like the rest of his farm.

The woodshop is complemented by a portable sawmill, solar wood dryer designed by Virginia Tech, and he's almost finished building a new shed to store more wood and his collection of farm implements. Bill and his son focus mostly on special woods like maple and cherry, always keeping the natural bark edge on the wood. He sells some of the wood, as far away as Washington state, provides custom cutting for others, but mostly he and his son use it to make furniture and other personal items. Neither have made a business off of their wood products though his son is a member of the Kentucky Guild of Craftsmen for his woodworking.

Bill is most excited about the new woodshed near the edge of his open fields. For years his tractors and attachments have been out in the elements. He tells us he has just recently purchased his final large implement, the backhoe. Over the years he has acquired all the tools he needs, but this one has been a long time coming despite all the ditches that have needed work. Bill just got tired of paying someone \$75.00 an hour to dig a few ditches around his land. His water, which he gets from the municipal supply, is nearly the only thing he outsources anymore save the occasional liquid fertilizer for his tomatoes.

Most of these improvements have been out of pocket, paid for over the years either from his payroll at the University, or now from his retirement. Fortunately, the tomatoes and 3 chest freezers of meticulously organized bean seeds, generate enough income for Bill to pay his grandson and up to 3 interns over the summer to help him. Bill never thought he would use his social security so much but he's admittedly glad it's there and with 40 years of teaching, he's doing OK.

For nearly 60 years Bill and is wife have lived in Kentucky, learning the climate, the soils and the people who live there. We asked him about his impressions of Kentucky and its people since he arrived. First he reminds us that at one time not so long ago, Kentucky was a net exporter of food, totally self-sufficient as a state. It wasn't until the discovery of coal that things began to change. He feels the change from self-sufficiency to dependency on a time clock has ultimately undermined the industrious spirit of the people. Now, as generations have passed it's difficult to rekindle the kind of self-reliance that was once so integral to Kentucky culture. Admittedly, people are still farming in Kentucky including many small scale plots for personal use but by and large people are only just beginning to remembering how important it is to grow your own food, for both body and mind. Moreover, people like the owner of

Husk restaurant are actively bringing more regionally grown food to people. Recently he ordered enough Greasy Beans for 2 acres of beans to go to his restaurant and interviewed Bill for a new book on remembering the value of regional foods. This chef and others like him are trying to reconnect people to food. Luckily, there are signs that this shift is happening in Kentucky.

Bill recounts a story from a Kentucky Vegetable Gardeners Association meeting, hosted by the Quicksand Research Extension Center to explain the cultural shift that's happening, however slowly. Around 3 years ago at the conference Bill remembers the researchers at Quicksand were trying to sell some green beans they were growing. Turns out, they could hardly give the beans away. When they talked to Bill, they told him that the beans were Blue Lakes, the research likely sponsored by a grant from a multi-national. To Bill it was obvious why no one would take the beans. In his own words, "it was like trying to give a Yugo to a Cadillac driver", there's no way someone growing delicious heirloom beans would want to waste time and garden space with a hard, protein free bean with little to no flavor. He hopes that the researchers were embarrassed, and perhaps they were as they began ordering heirloom beans from Bill to plant at their research station.

It comes down to education, bringing heirloom food production back to schools and research stations alike. Whether it's a small school garden or multiple acres to grow for the cafeteria, Bill doesn't see how else we can re-educate ourselves fast enough to manage population growth and subsequent demands for healthy, nutritious food.

That's why Bill has made it his life mission to preserve genetic diversity and to teach people how to do it themselves. He still feels like it is better for a child to watch a seed grow than to navigate apps on an iPhones. He has done his best over his life to open his farm to his children, their children, and whatever child wants to come see plants grow. Bill knows how important it is as he remembers his own childhood, in the sun picking with his mother, discovering life's simple and delicious pleasures.