

Annual Reports to Family and Friends

1994-present

from Paul VanRaden

2023 Annual Report

December 31, 2023 at 8:15pm

Greetings from Greenbelt after interesting research projects and a full travel schedule again in 2023. In Canada I presented new adjustments for uneven milking intervals with Deb as coauthor and in France methods to account for the growing use of cloning. Other business trips were to Louisville where I visited the Sabakas, to Madison when I visited Lanark to sort historical items with Deb and Judy, and to Phoenix this month. In November I got covid for the first time, no worse than a bad cold, but had to connect by zoom instead of meeting in person with industry advisors that flew here to MD to visit us. Covid is causing about 3% of current deaths and 10% of hospital visits so is still worth not getting.

In September, Cheryl and Angel moved about 30 miles from Clermont to Poinciana, FL. I may move there too in 2025, about 900 miles away. In 2023 I started practicing for retirement by doing non-USDA things such as helping Hillary and Andrea document our ancestry, writing and posting new material to my world web site, and creating a new personal web site. The first 2 links below may be of interest and include a few items borrowed from Hillary's pedigree pages. The last 3 links are more technical:

<http://www.paulvanraden.com/InteractingWithFamily.htm>

<http://www.paulvanraden.com/PersonalProblems.htm>

<http://www.paulvanraden.com/AbortionEthics.htm>

http://www.paulvanraden.com/Governing_a_United_Earth.htm

http://www.paulvanraden.com/Calendars_OldMeetsNew.htm

The news continues to report the crisis that people move from poor places to better places, which seems like a good thing to me. Moving to FL might benefit someone from Haiti even more than me, and they live closer to FL (< 900 miles) so obviously that should be allowed. In recent years, millions of refugees moved from Afghanistan to Pakistan, millions from Ukraine to Poland and Germany, millions from Syria to Turkey, millions from Myanmar to Bangladesh, millions from Sudan to Uganda, and millions from Venezuela to Colombia. Few refugees have moved to the United States, which is not even in the top 10 destinations. While our politicians invent new barriers, the real crisis is that we force people to live in hopeless homes in Haiti, Gaza, etc. instead of letting them move when they choose to better homes as we do.

Some food prices decreased this year so I can buy eggs again and my food cost is back down to \$2.54 day, only slightly higher than the \$2.28 that I paid for the same items in 1987. Food has inflated little over 36 years, what a bargain! General inflation this year is closer to the target of 2%, with 3% in N. America and 4% in Europe compared to last year's 7% in N. America and 11% in Europe. Unfortunately, Argentina's 92% inflation last year increased to 161% and Venezuela's 156% increased to 283% this year. Venezuelans who worked hard in earlier years now have few rights, jobs, or anything they can afford which is why some walk 2,500 miles to the Rio Grande. Better news is that Zimbabwe's inflation is down to 22% this year from 244% last year so we can celebrate their economic turnaround.

Exercise set a new personal record for me this year with 209 total hours compared to 155 last year. The main reason was biking the 6-mile round trip to the office most days totaling 1,300 miles. In 2023 my car went only a little farther than my bike but contributing more CO₂ into the atmosphere in its 1,500 miles.

After 7 years I had to update my resume in December for a small chance to get a higher salary during my last year at USDA. For the last decade I got inflation increases but no real increase in salary. Real income for the average person on earth increased by 3% this year, with 4% salary growth in less developed regions compared to 2.1% in USA, making some progress toward world equality.

This year 131 million earthlings were born and 59 million died, increasing earth's population by 0.9% in 2023. The U.S. population grew by only 0.5%. Even if we accept a million more immigrants in 2024 than we did in 2023, our proportion of the world's population will continue to decline. Currently the rest of the world supports about 3 times more citizens per acre of farmland compared to the U.S. Agriculture remains very important to most of earth's 8 billion citizens, even as millions of people in richer regions struggle against obesity.

My optimistic predictions for 2023 did not come true: Putin did not retire, and Trump is not yet in jail. The obvious prediction for next year is that we will waste too much time again hearing about an evil dictator or a candidate promising to become an evil dictator instead of working together to solve world problems. In 2024, please vote for the most truthful, law-abiding, kind candidates, even if they are over the hill. I am nearing the top of the hill and might soon be over the hill so that I can coast down to the easier life that awaits.

Hoping the new year will be happy and productive in your region of earth, and in all regions.

Paul

2022 Annual Report

December 31, 2022 at 8:04 PM

Greetings after another pleasant and productive year in Greenbelt, MD and best wishes for the next year everywhere. In 2022 many governments rediscovered that prices tend to go up if you give everyone more money without more stuff available to buy. Inflation went up to 7% in USA, 7% in Canada, 8% in Mexico, 11% in Europe, 12% in Russia, and 92% in Argentina where citizens are still happy because their soccer team just won the 2022 World Cup and their inflation rate is better than the 156% in Venezuela or 244% in Zimbabwe:

[Inflation Rate - By Country \(tradingeconomics.com\)](http://tradingeconomics.com)

During 2022 USDA still did not allow foreign travel but did allow attending domestic meetings again. In June I chaired the genetics program at the Dairy Science meeting in Kansas City and attended 4 other domestic meetings, but most smaller meetings still use zoom. Interbull's meeting allowed only in-person talks in Canada so I could not speak to them for the first time in 20 years but did give an invited remote talk to the World Congress on Genetics Applied to Livestock Production. They meet every 4 years - this time was in Rotterdam. USDA scientists could not even pay registration because the meeting organizers would not sign the new US government form requiring that they use no Chinese software. Fortunately our private-sector partners paid registration fees for the USDA scientists.

In September my research group relocated within Beltsville 3 miles east into the building that the other half of our Lab was in since we were merged on paper about 15 years ago. The move was an opportunity to thin out my own paper files and better organize the USDA historical files. Those go back to 1908 when our Lab invented the Dairy Herd Improvement data collection and analysis system that now measures up to 50 traits on more than half of all U.S dairy cows, summarizes bull data from 30 countries, and inspects cow genotypes from 60 countries. Business is booming.

Earlier this year the official U.S. government retirement income calculator said if I retire at age 65 my income will be 101% of what I get now for working. During the next 2 years I will try to hand off all current duties to others and then retire to do other research even more exciting than cow research. In 2021 and 2022 we hired 2 new scientists and are now hiring 2 new support scientists so I have a lot of training to do. Last year a high school senior helped as unpaid intern and then worked as a paid summer intern. Many of our previous USDA staff now work for the non-profit company that inherited much of the service work from USDA. Their office is 15 miles further east and could be another option for me.

This summer Cheryl and Angel and I attended the Baltimore wedding of stepdaughter Charlee to Jerry Jackson. They have been together for 7 years and have a son but finally made it official. See picture of daughters below. Then in October we took Charlee's 5 kids and Angel's boyfriend Cesar to Destin in the panhandle of FL so Charlee and Jerry could have some honeymoon time also in FL. It was a fun trip. Next week I will renew my personal passport that expired 6 years ago so I can use it for flying instead of updating my driver's license to real ID. Then I can venture out further and not just attend future official meetings using my government passport which I will not have in a couple years.

Diet and exercise can both improve health. For the past 8 years my annual reports have shown exercise trends in a table but this year in a graph for easier viewing. For the past 35 years my diet has stayed almost the same and my web site has updated the exact ingredients and prices every 5 years. This year I added more charts and graphs such as the one below. Inflation has made it very difficult to stay below the \$3 per day as I did since 1987 but the inflation adjusted food cost has declined over the decades as shown in the grey line. Many more nutritious and tasty details about food are available at:

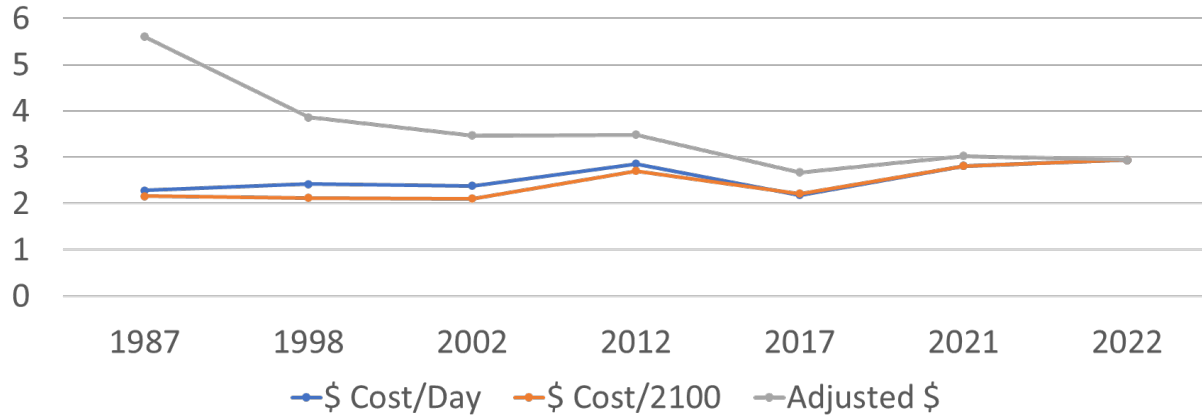
<http://www.paulvanraden.com/Nutrition.htm>

For the new year my most optimistic predictions are for Trump to begin a jail term in 2023 instead of a second term in 2024 and for Putin to follow Pope Benedict's example and retire instead of being arrested and sent to hard labor in Siberia or convicted by the international criminal court and deported to The Hague to serve a life term. Either of those news items will make 2023 very happy. A more

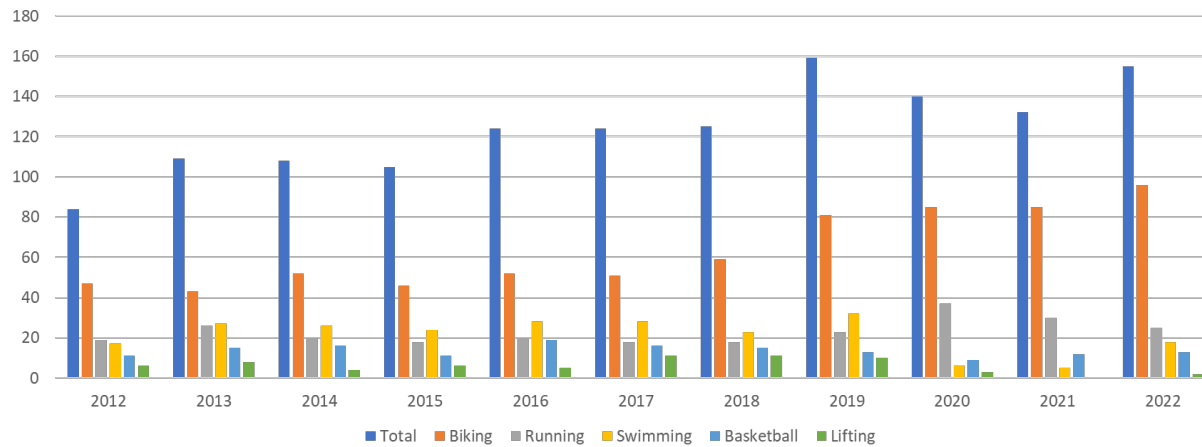
cautious prediction is that Miriam will discover that summer in Antarctica is colder than any winter in San Diego. In MD, Jan 1 and 2 will be 60 degrees so I predict getting an early start on 2023 exercise. May your next year be pleasant and productive.

Paul

35 Years of Food Cost



Hours of Vigorous Exercise per Year





2021 Annual Report

December 31, 2021 at 8:52pm

Dear family

My year 2021 began with an easy drive back to MD after 3 peaceful weeks in FL. A few days later some people who lost the presidential election lost their minds and tried to keep the Loser here in DC instead of sending him back to FL. He belongs in a DC prison with those who followed his lead in trying to lose democracy. That is all I will say about local politics.

Summarizing family events from 2021 seems less needed after a year of sib zoom meetings most Saturdays. Thank you Miriam for organizing and hosting those. Instead I will comment on one of the several annual reports already received. Bailey Elizabeth Winship still writes well and keeps up with who's who and what's happening as well as any of her human companions, but she seems stuck thinking the same final thoughts as 9 years ago. To me that just shows that you cannot teach an old dog new philosophy. Perhaps Brooke should write next year's letter to see if the next canine generation has learned new tricks or still believes in that same old philosophy. My philosophy evolved a lot when I was younger but has been steady for the past few decades. I hope that your philosophy serves you, those you know, and the others we share the earth with equally well. If it does not, even an old human can learn new philosophy.

Learning new physical activities is not as easy for old humans or old dogs, so I tend to keep doing the same old activities every year to keep my muscles and neurons both functioning. This year the outdoor pool and the weight room were closed again so some other activities were substituted:

Table 1. Exercise trends that keep Paul healthy

2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	Activity
846	853	811	587	509	516	460	520	425	472	miles biking
180	223	135	108	109	123	105	122	157	116	miles running
130	140	805	565	706	695	610	654	668	433	laps swimming
12	9	13	15	16	19	11	16	15	11	hours basketball
0	3	10	11	11	5	6	4	8	6	hours lifting weights
132	140	159	125	124	124	105	108	109	84	hours vigorous exercise
(total)										

My year 2021 ended with another December trip to FL but this time I flew down and bought a car while there, but did not get a chance to drive it. Maybe next trip. The year 2022 may seem about the same as the previous to most dogs, but most human lives will likely see more changes. May your philosophy help you keep up with the changes and make it a happy year for all.

Paul

2020 Annual Report

Dec 31, 2020 at 8:50 PM

Dear sibs

We all survived the pandemic year so congratulations on that. Our probabilities of survival will increase a little in 2021 after the vaccines reach us, but of us sibs only Judy (and Harold) are essential workers needed to keep the nation fed so they might have priority. I have been in FL the last 2 weeks where 65 year olds in theory can now get vaccinated but few have yet. Covid has not impacted me much except that managing employees is a little trickier without seeing them in the office. Maybe I should have asked Deb for advice from her years of remotely working for the dental society. One of my postdocs works from OH and one works here in FL. As of tomorrow I will have 3 more employees because my boss quit today and moved to Madison to work for an AI and dairy management company.

My 2020 exercise schedule had to be revised because the pool and gym were closed most of the year and the county took down all the basketball hoops also, so I ran twice as far to make up for the lack of swimming and lifting. Actually I played 3 hours of basketball with no hoop just to keep up my coordination and imagination.

Table 1. Exercise trends that keep Paul healthy

2020	2019	2018	2017	2016	2015	2014	2013	2012	Activity
853	811	587	509	516	460	520	425	472	miles of biking
223	135	108	109	123	105	122	157	116	miles of running
140	805	565	706	695	610	654	668	433	laps of swimming
9	13	15	16	19	11	16	15	11	hours of basketball
3	10	11	11	5	6	4	8	6	hours of lifting weights

The best news of the year was getting rid of our worst president in US history who spent his first 3 years trying to destroy the government, his last year failing to use it, and his last 2 months trying to overturn our old habit of 240 years of democracy. The pandemic was a temporary inconvenience compared to his more permanent damage of poisoning so many minds. I am very ashamed that small towns and farm communities bought all the lies, fear, and hate that he sold. Many years of truth, calm, and love will be needed to heal the effects of the poison. The new year, and the vaccines, will give us a chance to recover. Hope 2021 is happier than 2020 wherever you happen to be. We spent part of Christmas day in Disney because Angel had to work but it was a little dangerous because of too many people, even with masks. Happy holidays.

Paul

2019 annual report

Dec 28, 2019 at 8:10 PM

Dear sibs

Happy holidays! As the new year begins the US government is open and funded which is a big improvement over the 6 week shutdown last year. This year instead of trying to build a giant wall they are debating about the more trivial matter of removing 1 person from office. In our USDA office, 6 of the 13 people that were working 4 years ago were removed due to 3 retirements, 2 transfers, and 1 death and they were not replaced. But last week we got some good news that the USDA research budget will increase by 8.5% in 2020, and two weeks ago we interviewed to refill 1 position. The most qualified applicant for that was born in USA but spent the next 20 years growing up in Iran and then returned here for a PhD and is already doing beef cattle research for USDA in Montana.

The office water has been undrinkable for a year for about 1,000 researchers in Beltsville due to too much lead and no funds to fix the problem. But USDA's own estimate published in 2019 is that the genomic methods we developed for the past 10 years had a direct benefit to the dairy industry of \$4 billion. Three scientists in our lab are listed as being in the top 0.1% of scientists based on impact across all disciplines, and this June I received the award for best research in dairy science. But next year the Bureau of Engraving and Printing is planning to move out of DC, tear down the old USDA building where I worked in the 1990's, and build a big new building in its place to print all the \$ bills. I suppose that's an easier way to make \$4 billion.

In 2019 I had no international travel for the first time in decades because our national and international meetings were together in Cincinnati, but I already have 2 trips to The Netherlands scheduled for the first half of 2020. Last summer Angel tried selling Toyotas by telemarketing but after a few months went back to the Asian restaurant job. A new trend in marketing is shop online - pickup in store, and for the last month Cheryl got paid to shop all day long, collecting the items that people picked out and getting them ready either to be picked up or delivered locally. She liked the job but it was seasonal.

I enjoy getting the nice family pictures and news from the next generation in our family. Earlier this year when Andrea and Andy visited DC I remembered a picture of our large family attending church on Sunday morning in 1963. The attached is from the 100-year celebration of the Forreston reformed church. In the front row from left to right are:
Judy Paul Katie Miriam Mark Dave Bud Deb.

Commuting by bike most weekdays gave me more exercise in 2019 than in previous years. On weekends I ran and swam more, and the laps in the Greenbelt pool are also longer than in previous years. In 2020 it will be my turn to turn 60 but I'm not planning to slow down much. This fall while Charlee visited FL, I drove granddaughter Samira off to college in PA for her first semester. Her sister Lexy is also studying and working in Baltimore. Grandkids in college makes me seem old even if I don't feel it.

Table 1. Exercise trends that keep Paul healthy

2019	2018	2017	2016	2015	2014	2013	2012	Activity
811	587	509	516	460	520	425	472	miles of biking
135	108	109	123	105	122	157	116	miles of running
805	565	706	695	610	654	668	433	laps of swimming
13	15	16	19	11	16	15	11	hours of basketball
10	11	11	5	6	4	8	6	hours of lifting weights

Wishing you and your families good health, peace on earth, and more respect for each other than you see these days here in DC. Maybe the politicians we choose next year

will get along better and do their jobs so well we will hardly notice them, and everyone else can enjoy their lives and help others improve theirs. Happy next year.

Paul



THE CONGREGATION

2018 annual report, 2019 predictions

Dec 29, 2018 at 2:19 PM

Dear sibs

Happy holidays to you and thanks for your nice news summaries, cards, and pictures. My 2018 started with a 2-week trip to New Zealand for meetings where I reported on feed efficiency as a new trait which we hope to launch officially in 2019. In 2018 we also added genetic rankings for 6 more health traits (mastitis, ketosis, metritis, retained placenta, displaced abomasum, and milk fever) now recorded by many dairy farmers in DHIA. In 2019 we will also add rankings for age at first calving to allow selection for early maturity, and genomic predictions for crossbreds whereas previously we did only separate predictions for each pure breed.

This summer to get a shorter commute I sold my house and moved to 446 Ridge Road, Apt 2, Greenbelt, MD 20770, about 3 miles from work instead of 19. When the weather is nice I bike to work on nice bike paths most of the way. This fall my indoor pool is full length but was half length in previous years, so my miles of swimming have increase even if laps have decreased (see Table 1). Recently the USDA Beltsville research center changed water testing methods and found that our old pipes are delivering many times the allowable levels of lead, much like in Flynt, MI. I drank only tap water at work for the last 30 years and hopefully it has not slowed me down, but now they provide bottled water.

In October I got to visit Deb and Judy between speeches at the World Dairy Expo. In Nov Angel turned 21 and went to Las Vegas with Cheryl, and in Dec I got to meet Angel's new boyfriend Darren. My next trip will be to Reno to celebrate 10 years since we invented genomic prediction and to forecast the next 10 years. Our cow database was the first to reach 1 million DNA analyses and now we have 3 million but Ancestry.com now has more than 10 million DNA samples. Cows get results in 1 week whereas humans have to wait 6-8 weeks for their DNA results, except during the holidays when the human service is even slower.

Probably you get too much news already from DC so I try to avoid that if possible. Each year at USDA seems to bring more projects but fewer researchers to do them, but this week we are down to 0 researchers. Being unemployed at the holidays has not slowed me down, but most people prefer doing steady work for a functional organization. Mark's comments are all true and were obvious to everyone already in Nov 2016. Unfortunately, half of Americans voted for the lying and cheating for entertainment sake or because they actually do hate citizens of other countries, cultures, or religions. In the rural towns where we grew up, 60-70% still love the lies and fear the world. I do not. The truths I believe in have stayed true over the last 2 decades and are well documented for all to see:

<http://paulvanraden.com/>

Wishing you, your families, your friends, your neighbors, and the whole planet you live on a happier 2019.
Paul

Table 1. Exercise trends that keep Paul healthy

2018	2017	2016	2015	2014	2013	2012	Activity
587	509	516	460	520	425	472	miles of biking
108	109	123	105	122	157	116	miles of running
565	706	695	610	654	668	433	laps of swimming
15	16	19	11	16	15	11	hours of basketball
11	11	5	6	4	8	6	hours of lifting weights

2017 annual report

Dec 31, 2017 at 8:37 PM

Dear sibs

Happy 2018, in a few hours. The year 2017 was very busy here but not as happy as some previous years. Life is better when leaders solve problems rather than create problems for others, and remove barriers rather than build walls.

As predicted last year, the 4 frozen jobs at my office are still empty and we have only 10 of our 14 positions filled now, down from 20 employees a decade ago. Instead of hiring directly, USDA asked us to reroute our leftover budget funds to hire 2 postdocs for 1 year terms via the Department of Energy! Normally our workers have to come to work, but one of the 2 new postdocs is working remotely from the University of Georgia where she just finished her PhD in animal breeding. Normally we have to hire U.S. citizens, but the new jobs were open to foreign citizens, and the second postdoc just arrived from China. Normally we must work on only projects in the 5-year plan that we wrote last year and was approved this year (with the highest possible score from external reviewers), but instead of working on that we had to think of additional projects not in our 5-year plan for the 2 new postdocs to work on! Normally the Chief Scientific Officer at USDA is supposed to know science, but the president's nominee for that job had no scientific training and instead was an anti-science talk show host.

My health has been good except for a bad back for a month last summer. In general, experts continue recommending exercise as a way to keep feeling young, and I continue following their advice, as shown in Table 1. My records use pencil and paper, but many people now wear fitness tracking devices to estimate how much walking they do, and the phones of some of my coworkers also measure their driving habits such as speeding, braking, accelerating, cornering, and rank them compared to other drivers in the county. One coworker's 19-year-old son already had 5 accidents and totaled 2 cars in his first 2 years of driving, but his phone still rates him as average for the county, so either the phone is not accurate or the county has very bad drivers.

My 20-year-old daughter is a very good driver and even drove from Shannon to Forreston this month, stopping at White Oak and at aunt Deb's farm. We both enjoyed visiting the family, and aunt Miriam was a great host. Sorry that Angel missed seeing Mark, Lise, and Gwynneth. When returning to O'Hare after seeing downtown Chicago for a few hours, my plane was delayed about an hour because of a short snow burst, and the de-icing crew and equipment were not ready. The thermometer is forecast to stay below freezing all this week in MD, reminding me to schedule my next trip to FL. Cheryl continues working at Lowes there, and Angel at Disney Springs.

Twenty five years ago was the final year of our brother Dave's life and the first time I wrote a poem. It ended "I will honor your name just doing more of the same, and telling truths so clear you'd slightly smile if you were here." In 2017, truth seemed to disappear from the white house and some areas of government. Trust is easy to destroy but takes a long time to restore because many truths and nice things are needed to counteract each lie and mean thing. Many of us in government still try to maintain trust by describing the facts and predicting the future as accurately as possible, and giving society the most value back for each tax dollar received. You and your families also contribute very positively to improving earth's total goodness. In 2018 and beyond, we should continue to say nice things, tell truths, and not allow a loud mouth's shouts to drown out prouder sounds. We all deserve a happier, more harmonious new year.

Paul

Table 1. Exercise trends that keep Paul healthy
2017 2016 2015 2014 2013 2012 Activity

509	516	460	520	425	472	miles of biking
109	123	105	122	157	116	miles of running
706	695	610	654	668	433	laps of swimming
16	19	11	16	15	11	hours of basketball
11	5	6	4	8	6	hours of lifting weights

2016 annual report, holiday pictures

Jan 7, 2017 at 9:54 PM

Dear sibs

This 2016 report is a little late because I was in FL taking a break, but after 5 days of 80 degrees I returned to MD in time to shovel snow and now I have a cold. This report may seem shorter than last year's but is actually longer, because 2 pictures are worth 2,000 words according to my math. In attached picture a, back row left to right has Grandma, Charlee, Angel, and Grandpa, middle row has grandkids Brandon, BJ, Samira, and Elexys, and front row Jeremiah. Angel is 19, works at Disney, and has a boyfriend, and so far the grandkid contribution is Charlee 5 and Angel 0 which seems fine for now.

At my office we had 6 PhDs in 2000 and then 4 in 2015, but in 2016 one retired, one left for a USDA job in WI, and the other one is now boss of the merged lab and has many more people to manage, so I have many more duties than before but also a couple more employees of the scientists that left now working for me. We may not be able to rehire for the 2 scientists if republicans decide that the best way to create jobs is by a hiring freeze. In December the dairy breeding industry approved spending > \$1 more for extra data collection. For example, already a USDA grant spent \$5 million to collect daily feed intakes of 5,000 cows, and we will start doing genetic selection to reduce feed intake for millions of other cows and bulls with the new data collected. The industry will collect several other new traits too.

At home, I tried to stay active in case my feed intake was too high. Most 2016 activity totals are up from 2015 which is good unless I'm just running in circles. In 2017 I'm getting off to a slow start because of this cold and snow.

2016 2015 2014 2013 2012 Activity

516	460	520	425	472	miles of biking
123	105	122	157	116	miles of running
695	610	654	668	433	laps of swimming
19	11	16	15	11	hours of basketball
5	6	4	8	6	hours of lifting weights
0	0	5	3	0	hours of tennis

Thank you for sending your annual reports and pictures, and may 2017 be another fine year for you. The next 4 years may be bad for the country, but in 2020 voters can elect someone new to make America great again. Until then, we can do our best to make the whole world better for everyone.

Paul



 Show Purchase Options

2015 annual report, 2030 predictions

Jan 1, 2016 at 11:31 AM

Dear sibs

Happy New Year! Thanks for sending your holiday updates, my annual reports are hopefully informative even if not as festive. The past year was exactly as long as the meteorologists forecast (365 days), but the next year they predict will have 366 so we'll see if that holds true. Forecasting the weather is a little trickier, but sometimes they get very precise with that too. Last winter when the weather.com web site got too slow I started using accuweather instead, and laughed when their first forecast said "It will begin snowing in 7 minutes." I looked out the window and did not see any snow, but 10 minutes later it was snowing, so I was impressed with the accuracy. If their long term warming forecasts are correct, we should all begin moving north as Mark and Miriam did this year instead of south as the rest of my family did.

More dairy farmers continue to use the accurate genetic predictions we calculate at work. In July our database was the first in the world to have > 1 million DNA samples genotyped. Now we have 1.16 million genotyped dairy cattle, but ancestry.com just passed us with >1.2 million, and 23andMe also has >1 million. Their predictions are not yet very accurate, but eventually they may catch on.

Two years ago I got a new boss when our labs merged, but this month she announced that she will no longer be our boss and will just be a scientist again. For awhile we will take turns being the acting research leader, but soon will need to decide on a more permanent replacement. I prefer doing research and programming, but may volunteer. The pay is the same either way.

Forecasting requires accurate data. When first comparing this year's activity data to last year's below, I worried that fitness is declining too quickly. However, the trend from 2012 to 2015 is ok, so maybe I should not worry. Most extrapolation models predict that my activity levels will still be positive in 2030 at age 70 rather than 6 feet under. A steady decline of just 10% / year would lead to a negative biking or running distance in 2030 using linear prediction, but most experts extrapolate using exponential functions. In that case, being 90% as active each year as the last year would reduce activity by .9 to the power 15 or to only 21% of current fitness in 2030. Holding the decline to just 5% per year gives 46% of current fitness, whereas just 5% more activity each year could double your fitness over 15 years. My main activity in 2015 not recorded below was 3,800 hours of staring at computer screens. Of course, just enjoying life without so much data analysis is also a recommended option.

2015	2014	2013	2012	Activity
460	520	425	472	miles of biking
105	122	157	116	miles of running
610	654	668	433	laps of swimming
11	16	15	11	hours of basketball
6	4	8	6	hours of lifting weights
0	5	3	0	hours of tennis

More important than my happiness or your happiness is of course the earth's total happiness over all people, with some credit for animal happiness and a tiny credit even for plant happiness. I predict that 2016 will be less happy than 2015 because more time will be wasted on political attack ads instead of calmly solving problems together. Already in 2015 I began watching more news from ALJazeera or BBC, but even their more thoughtful international reporting often gets trumped by worthless American politics. My forecast for 2030 is more optimistic than for 2016 because even a political party that currently seems very hateful and stupid eventually will remember why that political party was formed: "It is a struggle for maintaining in the world, that form, and substance of government, whose leading object is, to elevate the

condition of men - to lift artificial weights from all shoulders - to clear the paths of laudable pursuit for all - to afford all, an unfettered start, and a fair chance in the race of life. (Abraham Lincoln's speech to Congress, July 4, 1861).

May you, your families, and everyone get a fair chance to enjoy 2016 and to prosper until 2030 and beyond. Have a happy year.

Paul

Happy New Year, and 2014 annual report

Jan 1, 2015 at 2:23 PM

Dear sibs

Greetings to you in 2015, and congratulations to us all for completing another lap around the sun while spinning 365 times toward the east without getting dizzy. This year Miriam intends to do 1 spin toward the west, but at a less than dizzying speed. During 2014 I went in a few different directions, spending some weeks in FL and giving speeches in Berlin, Vancouver, and Phoenix, and next in 2015 will speak in Australia in March. In July the 2 main summer meetings that I usually attend in Europe and U.S. will be held jointly in Orlando, and many of the researchers from my office will get to go. Angel will graduate from high school in late May and is learning a lot about capitalism. Her employer made her work on Christmas eve, Christmas day, New Year's eve, and New Year's day, with no extra pay, and forced the employees to sign a form saying that they would be fired if they did not show up. Merry Christmas from Ronald McDonald.

At my office we had many changes in 2014. Two years ago USDA began to privatize our dairy genetic evaluation service and also combined the animal science and plant science institutes at Beltsville into 1 center. Last April they announced that our laboratory would be merged with another and the leader of that lab would become our boss, despite being 1 pay grade lower and doing much less research than the scientists in our lab. Then in October USDA merged the regional research offices into larger areas, forced the Beltsville director who decided on our lab merger and privatization to retire, and tried to replace him with a director from TX who left after 1 week on the job, and then replaced him with another director. Now all of my 5 immediate bosses have poor to mediocre research records, and all are new to their jobs within the past 2 years. In October the dairy industry hired the director of the international bull data exchange system from Sweden to manage the U.S. privatization effort, but that transition is going slow and us bureaucrats are still doing most of the work.

At home I spend most of my time on the computer but try to keep active to keep my mind off of office politics. For the last 3 years my log book shows:

2014	2013	2012	Activity
520	425	472	miles of biking
122	157	116	miles of running
654	668	433	laps of swimming
16	15	11	hours of basketball
4	8	6	hours of lifting weights
5	3	0	hours of tennis

Today is a bit too chilly to begin 2015 activities and the community center is closed, so it was a good chance to send some news. Thank you for sending yours, and hope that our next lap around the sun brings another 365 good days your way.

Paul

Hello in the new year (2013 annual report)

Jan 1, 2014 at 9:17 PM

Dear siblings

Greetings and thank you for the letters, news, and pictures from 2013. The Winship family photo was impressive with some new faces in the group to create future demand for agriculture. The year was less eventful here so my report will be short. Mark listed many reasons for moving to MI, but most did not seem as logical as the reasons I have heard for moving to FL, except the one about being closer to family that did make more sense than being further away. Cheryl and Angel are pleased with their choice and do not miss the winter snow as much as you might expect.

At USDA I have 5 employees now so am keeping busy organizing more research and still doing lots of computer programming directly. This fall we celebrated having 500,000 animals genotyped with a pizza party, and many farmers are now paying about \$40 each to get DNA inspections for their whole herds. Also farmers in many other countries are getting genomic predictions from us because that service is either not available or not as accurate there because of smaller databases. My current research is deriving methods to analyze full sequence data (3 billion ACGT letters) for each animal because about 500 bulls are now fully sequenced and many of the exact mutations are being located. After finding those it is extremely cheap to genotype the mutation site for all other animals, and the Supreme Court in 2013 made it possible for any U.S. company to read the DNA without worrying about patent fights, but the genotyping companies do a lot of foreign business where patents are still enforced so cannot yet take full advantage of the technology.

The holidays were peaceful and productive here even if peace on earth has not reached everyone yet. I hope that 2014 is a good year at your current or new location and for your families. Have a nice new year.

Paul

Happy 2012

Jan 2, 2012 at 9:18 PM

Dear siblings

Best wishes for the new year. Only a short report from me now because more news will arrive in the next weeks or months. December 31 was the last day of work for my boss Duane Norman after 42 years in our office. He was promoted to research leader in 1988 when they hired me to fill his previous scientist job. Nobody knows yet who they will promote this time to research leader or if we can hire another scientist because we are under a hiring freeze. The agriculture research budget decreased 9% last year and 12% this year, and the candidates campaigning in Iowa all hope to make more drastic cuts in the future. During the last 7 years, 7 positions have already been cut from the 22 employees we had before, at a time when our duties greatly expanded to include direct analysis of DNA from several countries (USA, Canada, Great Britain, and Italy). One other scientist George has been here longer than me but his research has not had as much impact. Neither of us can get any salary increase from a promotion because we are both already at the legal limit. Therefore being named the leader might be just more hassle and less research even tho it sounds nice.

Christmas and New Year were spent here with Charlee and her kids, whereas Thanksgiving was on a nice cruise in the Carribean with just Cheryl and Angel. Not many business trips for a while because our travel budget was cut in half last year and further cut this year. Not sure who is creating all of those large government deficits, because our group has not seen many of the proceeds here recently. Hoping your budgets all improve in 2012 and that you continue to be the leaders in your families and communities. Have a great year.

Paul

2000 Report

December 20, 2000

Dear family and friends

Happy holidays and best wishes for your new millennium. The year 2000 was a good one for me excluding the last month or so. Thanks to those of you who helped get me back to higher ground after I somehow stumbled into a depression. In the last year I gave up work on my book *The Right To Migrate*, but began other hopeless attempts to do impossible things. Maybe in the future I should stay on level ground instead of climbing to new heights and then falling to new lows.

My work at USDA went fairly well this year except a few emergency fixes of data we reported for foreign bulls. We try to rank all the bulls from 25 nations four times a year. That's not easy because some traits are missing and we have to guess at them and our guess programs didn't work right. The rest of my projects were well received and most of the farmers like our new rankings. In July, I received a national award for my research and a pay raise up to the highest grade that most scientists get to (GS-15).

On New Year's eve last year, I began inventing a new piano keyboard. The current keyboard is okay but not great and was designed in about 1350 AD. Every piano and organ since then was tuned with 7 notes per octave on the white keys and 5 notes per octave on the black keys because the pattern is uneven. A new keyboard with evenly spaced keys is desperately needed so that users can tune the keys (electronically) with evenly spaced, simpler math using more or fewer notes per octave. The new keyboard requires new music notation, so I worked on that, and then made an audio tape called "The Theory of Music" to explain the new system.

Last spring I noticed that the theory of gravity might be up-side down so began research on that also in my spare time. Instead of pulling on each other, pairs of masses might simply be blocking very small (ether) particles that would have hit the other mass. According to this new theory, an apple drops because it is pushed from above instead of pulled from below. Near earth, many of the particles that would have hit the apple from below are blocked. The fraction of particles blocked by any mass declines in proportion to the square of its distance away, giving the same math as Newton's or Einstein's theories. I have not yet shared this exciting, new theory with anyone in physics or astronomy, but maybe some day they will be ready.

In May, Cheryl and I celebrated our 5th wedding anniversary with a trip to Las Vegas. Staying together also seems hopeless sometimes but the probability that we'll stay married is actually fairly high compared to some of my other projects. Angel turned 3 in November and is attending day care three days a week while Cheryl works part time. Neither of them spend any time helping Daddy with his new theories. Someday, Paul hopes to aim carefully and throw a snowball at hell and knock the devil out cold and give everyone a Merry Christmas.

1999 Report

April 1999

Dear family and friends

Merry Christmas. This letter was about half written in December but at that time I had more bad news than good news so I waited for something good to report. The bad news is that USDA wants to fire me. The government teaches all bureaucrats to believe that everyone should have equal opportunity and civil rights, but it also says we should never hire any foreigners. I walked out of the government's civil rights class because I can't pretend that hiring only Americans is fair. I would rather be fair to foreigners.

The other reason I don't write much is that I tend to write sermons that nobody wants to hear. For example, our government could just treat people as people instead of forcing me to totally discriminate against the majority of people. At a meeting in Australia last year, I met a Philippine woman studying in Canada using computer programs written by a German and an American (Ina and me) to analyze Norwegian salmon data. Some of the salmon may actually have been Swedish citizens that swam up the wrong stream, but I won't tell on them if you won't. End of sermon.

Angel is almost 1.5 now and she's doing okay. All little kids seem about the same to me, but some people think they can see differences at this age. For example, cousins Andrea and Gabriele, after close inspection, claimed that "Angel is one of the cutest kids ever!" Their mother said Angel is adorable, she looks might cute." She's still kind of cute even after pulling a hot iron down off of the counter and hitting herself in the eye with it. She was happy to entertain visitors Miriam and Bob and also Deb and grandma Katie last year. She likes people.

Cheryl and I don't let Angel slow us down too much. During 1998 we went to Illinois, Colorado, and New Jersey. Then Cheryl and some friends took her to South Carolina, and grandma Dora and Cheryl went to Florida. In October, Angel will be two and then she'll have to buy a ticket too instead of flying for free. Because of this, Cheryl and I decided to take a big four-continent cruise with her this year in April/May. From Miami we go most of the way to South America and then the ship turns left to Africa and then left again to Spain and Italy.

No one on Paul's side of the family has sailed across the Atlantic since about 1850 and on Cheryl's side of the family from about 1750. One of the more exotic stops is Casablanca on May 1, but of course you can rent the movie and pretend you're there with us for a few dollars instead of spending a few thousand.

Speaking of movies, last night we watched Titanic and Angel cried when the ship went down. So we'll sail south to avoid the icebergs.

Sincerely,

Paul, Cheryl, and Angel VanRaden

1997 Annual Report

December 1997

Dear family and friends

Happy holidays to everyone. Hopefully, Santa will bring everyone everything that we ask for again this year. Last year Paul and Cheryl asked Santa for a baby (mostly Paul's idea) but Santa had a busy schedule delivering all of the gifts and didn't have time to deliver babies too. So instead of Santa we wondered if the stork could drop off a baby, but the storks must have been on strike because time went by and no babies arrived. So we had to make a baby all by ourselves. The baby arrived in Annapolis, MD, USA on November 13, 1997 weighing 7 pounds 3 ounces (3.27 kilograms) and we named her Angel Lynne VanRaden. She doesn't have a halo or wings or any special powers, we just hope that she'll try to be as good as a human can be.

In September we moved about three blocks into a nicer townhome (mostly Cheryl's idea). Charlee moved about 25 miles to north Baltimore and is spending her senior year at her father's house. This summer she got her driver's license and then a car and had it for about three days until it smashed into 2 other cars while she was trying to change its radio station. On the bright side, at least we have 16 years before Angel asks to borrow the car keys. Our new address and phone number are listed above and then you can report your news and your crashes to us.

The job skills that Cheryl learned 17 years ago are still very useful today. She is enjoying her return to the job of full-time Mom. After 9 years at USDA, Paul finally has an assistant. For much of the year he had two. One was a temporary post-doc until USDA got extra funding to continue the job as a permanent scientist. Then Paul had to fire Yang Da, a highly qualified researcher with 12 years experience in the US after coming from China and a PhD from U. Illinois, and replaced him with an American, who everyone agreed was less qualified, because permanent government jobs are reserved for American citizens. Yang Da quickly found higher paying work at U. Minnesota so he's not too mad at Paul for firing him. Immigrants can't get Equal Opportunity even from Paul. Some of them enjoy reading his book *The Right To Migrate*.

Last summer the four of us, including little kicking unborn Angel, cruised to Puerto Rico and on the way back we saw the coastline of Haiti. Not many babies born in Haiti will ever see the coastline of the United States because we pay the American Navy and Coast Guard to make sure that they won't. At Christmas we remember a baby born almost 2000 years ago in the Middle East. Our little Angel isn't perfect, but we would love her the same whether she was born in the Middle East, America, or Haiti. We hope you would too.

Sincerely,

Paul, Cheryl, and Angel VanRaden

1996 Annual Report

December 6 1996

Dear family

Here are some pictures from a recent trip that Cheryl and I took to South America and also copies of some very old pictures for you that I inherited. If you can find similar interesting old photos on the Ratmeyer or Ellis side of the family then I'll make copies for whoever else is interested in having a set. I'll keep the negatives so if my nieces and nephews want copies for their own families some day then they can just ask and I'll make some.

As predicted, my family has less news to report from Maryland this year than we had last year. The big trip we took to celebrate our first anniversary wasn't quite as much fun as the honeymoon trip. Cheryl likes to shop when we're on vacation (and also on weekends and after work) and we didn't find many bargains, so about the only thing she brought back from South America was me and a few rolls of film. Charlee is hoping to get a car and a driver's license for Christmas. Then Cheryl won't have to chauffeur her to her job at Wendy's anymore. The computer and printer that she (we) got for Christmas last year have gotten a lot of use. My book looks more like a book now and I've sold over 20 copies. Mom is the leading purchaser so far.

Everyone here is fine and we hope each of you have a happy holiday season.

Sincerely,

Paul et al

1995 Annual Report

December 18 1995

Dear family and friends

Hello and Happy Holidays. The last year was tons of fun here and I hope that you at least had liters of laughter where you live. Sometimes I get the urge to go back to the Midwest or the Far East or to your continent to see you but instead I go back to work and wait for people to come this way. Mom and Dad and Keith Boldman and Mike Grossman all from Illinois came to visit this year, so I can't complain.

In case you wondered what's been happening in my little branch of the VanRaden family (or maybe you once knew but don't remember), here are the highlights:

January	Paul and Cheryl and Charlee just missed 5 Winships and 1 Levy at Disney World
May 18	Paul and Cheryl said "I do."
May 19	Honeymoon, tons of fun. My old friends Hiroshi, Chen, and Sompop from Iowa helped us see Tokyo, Beijing, and Bangkok.
June	Cheryl found a new job at a medical clinic
July	Charlee moved to our new house.
November	Cheryl found a better job at a hospital.
November	Paul was named best young scientist in the USDA Agriculture Research Service.

Next year should be less eventful. The main event is that copies of my book will soon be available for comment. If your schedule for next year still has some time left for reading, my publisher (Charlee) can send some. She might need a couple months to get the presses rolling because the computer and printer are still under the Christmas tree.

Sincerely,

Paul VanRaden

1995 Announcement

February 27 1995

Dear family

Thanks for your letters, pictures, cards, calls, calendars, checks, etc. Cheryl and I will try to send pictures from time to time. We just got this engagement picture taken even tho we've been engaged for 8 months. We're still planning for a little wedding sometime this year and then many years of companionship, fun, etc.

Also I'm sending a poem that I wrote for Cheryl (at her request). She got it for her birthday (June 20) and then we sent it to a National Library of Poetry contest, where it's a finalist so far.

http://www.paulvanraden.com/I_Found_Cheryl.pdf

Cheryl, Charlee, and I just back from Florida. We hope that the rest of you had a good time there too. Sorry to you who stayed at home this winter even if the weather was better than usual. We had 85 degrees and sunshine in Florida, so I didn't mind getting a little soaked on Splash Mountain. Due to meetings on my cow research, I had to stay inside a couple days, but the rest of the time was fun.

Paul

1994 Announcement

October 8 1994

Dear family

Hello from Odenton, MD. Cheryl and Charlee and I just moved into our new townhouse here so this letter is to give you our new address and phone number. Cheryl and I have been engaged for a few months and we plan to get married in November 1995 with a very small wedding. We have room for company in our new house if anyone would like to come visit us. Charlee (Cheryl's 14 yr old daughter) will be spending part time in Baltimore with her father and part time with us. She's attending a special high school with medical emphasis.

The house is sort of half way between my job in Beltsville and Cheryl's top secret job in Columbia. Odenton is about 5 miles south of BWI airport, so we'll be able to hear your plane coming. Hope to see you soon, but you might want to wait until the furniture gets here. Sorry if any paint got on the letter.

Paul