My favorite Psalm is 90. It speaks to me most clearly of our obligation to think, and think again, before surrendering to despair. Today I’d like to begin with one line:

Psalm 90 (12)
Teach us to count our days rightly,
That we may obtain a wise heart.

As you’ve learned, I am here today because in recent years, the Columbia University Center for the Study of Science and Religion has shared a resource center in Riverside with Dr. Thomas’s Education Ministry, and also because Riverside has chosen to count the days in a new way, to include this week devoted to Eco-Justice.

So thank you, for giving me the opportunity to count this day rightly, as one in which I may speak with you all on a serious matter that involves us all.

How then shall we count our days rightly? One way - to honor the variety of different ways we Americans are free count our days - would be to note that today is about midway between two of our many celebrations of liberty and hope, Easter 2008 and Passover 5768. Let’s look a little deeper at those notions.

The Bible has another way to count days, in multiples of forty. The fourth of the five Books of Moses is called *Numbers* in English, but in Hebrew it is called *B’Midbar*, that is, “*In the Wilderness.*” In *Numbers 13*, the Israelites send scouts, led by Caleb, from their desert encampment into the Promised Land. They return *forty days* later, reporting that the Land is good, but reducing themselves by self-mockery and self-deprecation.

31] But the men who had gone up with him [Caleb] said “We cannot attack that people, for it is stronger than we.”

32] Thus they spread calumnies among the Israelites about the land they had scouted, saying, “The country that we traveled and scouted devours its settlers. All the people that we saw in it are men of great size;
33] we saw the Nephilim there – the Anakites are part of the Nephilim – and we looked like grasshoppers to ourselves, and so we must have looked to them. ”

The punishment for this failure of self-respect is direct and to the point, in Numbers 14:

31] Your children who, you said, would be carried off – these will I allow to enter; they shall know the land that you have rejected.

32] But your carcasses shall drop in this wilderness,

33] while your children roam the wilderness for forty years, suffering for your faithlessness, until the last of your carcasses is down in the wilderness.

34] You shall bear your punishment for forty years, corresponding to the number of days – forty days – that you scouted the land: a year for each day. Thus you shall know what it means to thwart Me.

Joshua – the one Scout who did not make the mistake of self-deprecation – would indeed lead the next generation of Israelites to that Promised Land, but only after an additional forty years – one year for each day – so that the generation of self-mockery would die off to leave their children to enter it with confidence.

Forty years is a long time, but even in the days of Israelites, it was shorter than an average person’s lifetime, and today with good medicine, good food and good luck, it is only the first half of a lifetime.

In forty years or so, we will be at mid-century. That will be the time when my most well-informed and dispassionate colleagues in the sciences tell us that the carbon dioxide we continue to put into the atmosphere by burning coal and oil for our transportation and our electric power, may reach a concentration that would irreversibly heat our planet’s atmosphere and oceans, making our days here - or anywhere else on Earth - considerably different and more difficult than they are today.

We have known about the need to control our planetary addiction to the burning of coal and oil – so much like a person’s addiction to tobacco - for closer to forty years than forty days. But, like those scouts in the Bible, we have for the most part acted as if the problem were gigantic, and we were but grasshoppers in our own eyes.

What about forty years in the other direction, back to the mid-sixties? When I look back I see myself and my wife and our infant daughter in Manhattan as the Vietnam war ground on, marching for peace and justice and hearing far in the distance the amplified booming prophetic voice of Dr. King. We heard him
then, just as he was beginning to draw the connections between our acts of war, our acts of selfishness, and our self-destructive acts of powerlessness and denial of what might be possible. We heard that voice of hope and liberty, and then he was lost to us all.

So I am here to tell you, my friends, my brothers and sisters, my fellow New Yorkers and my fellow human beings, that unless in the next forty years those of us moved by Dr. King can be more organized, more clear, more effective and more committed than we have been, our grandchildren will certainly have the right to be bitter in their judgment of us, and they will be right to say of us that we were as grasshoppers in our own eyes.

For myself, these past forty years have shown me a path to doing better, and I’d like to share that with you. I am a scientist by training. That means I have been taught the craft of converting my curiosity into a set of ideas that can be tested.

This notion of testing – we call it doing experiments – is the key step in science, because when the test fails, there’s no choice but to say of our idea “It’s wrong,” and move on. That way, science keeps itself from wasting more time and effort than necessary, on ideas that can be proven wrong by testing.

Of course there are many ideas that cannot be tested nor disproved, but must be either accepted or not on faith – the Ten Commandments are like that, so is the Sermon on the Mount and the Reading you have today from Luke 12. But there are many, many ideas that can be tested.

From the ideas that can be tested, have been tested, and have been found to survive the test, science has built up a remarkably clear vision of our place in the natural world. So I am here this morning to share with you a few facts brought to us by cold light of science, that may help us all, as we try our best to meet our responsibilities to each other, to our children and grandchildren, and to the planet we hope they will be able to continue to enjoy in their time.

These same few facts should also help us all get a better sense of ourselves, than those scouts had of themselves when they saw themselves as no more effective than a swarm of grasshoppers. We are not grasshoppers, we are people. But what does that mean in the light of science?

We are chemical, science says, made of only a few elements, the same elements that fill the universe: Hydrogen, Oxygen, Carbon, Nitrogen, Sulfur, Phosphorus. But so are grasshoppers.

We are complicated, science says, with one chemical, called DNA, so complicated that it carries in it an instruction book for the construction of a whole new creature from a single cell. But so are grasshoppers.
We are a species, science says, with each one of us being fertile, that is, capable in principle of being the source of DNA for the formation of a new generation of individuals in our species. But so are grasshoppers.

We are mindful, science says, with brains so big, so complicated, so capable of learning and imagination, that we have become quite dependent upon our mental worlds. Grasshoppers are not mindful – so far as we can tell - so that does lead us at last to some useful facts.

The useful facts are these:

First, as a species, we are different not only from grasshoppers but from everything else alive. The mental world is expensive: we spend upwards of a quarter of the energy we get from food on the upkeep of our brains, this tissue no larger than two clenched fists. And the price has been high for the planet as well: we have used our minds over only ten thousand years or so, to become a hundred-thousand times more numerous than any other species of animal our size. But in our special mental power lies our hope and our liberty, if we would only take responsibility for each other’s future.

Second, we are indeed brothers and sisters. We now can ask of the DNA that encodes each of us, how are we different from one another, in what we inherit from our parents’ DNA? The DNA of any of us in this great nave today is a text of about six billion letters. That text will be different in each of us - unless we have pairs of identical twins in church today; are there any here? - but the differences will amount to only about one letter in a thousand.

So look around, look for the person who looks most different from you, by whatever way you have to tell yourself that another person is really different. Science tells me to tell you, that Dr. King got it right forty years ago. That person’s DNA and your DNA are about as similar or different, as your DNA is from your biological brother or sister’s DNA. We are all one family.

But wait, there’s more. Each of us is made from a unique human DNA text. It is our particular version of the seven billion versions of human DNA that are now alive on the planet. The version each of us carries is like one version of a book written in seven billion slightly different editions, with only one copy per edition.

A new edition is printed with the birth of every child. And – in case you had not thought of it already, I will have to be the one to tell you this from pulpit, probably just as well – each edition of the human DNA text in each of us, will be lost forever in this world, when each of us dies. Think of it: everyone in this nave – everyone - is the repository of an absolutely unique genetic text, one of so many possible texts of that length that there is absolutely no chance of it every being written a second time.
Is there anything more rare, more precious, than that? Surely science here provides a deep grounding for our shared certainty that every human soul is absolutely of equal transcendent value. All excuses for claiming otherwise, for proclaiming one or another individual or group’s special excellence at birth, are no more than claims that your DNA is in some way better than mine.

All such claims – racism, economic prejudice, nationalism, religious prejudice – are fictions of our minds. These distractions have had enormous political and economic power over us all, but they are lies nevertheless. They are a modern, technological-sounding way of seeing others as grasshoppers. And of course, if everyone thinks that way about someone else, it is no different overall, from everyone thinking of themselves as grasshoppers as well.

So let us resolve today to do better than Caleb’s scouts. Let us resolve today to begin to see each other as equally valuable, equally rare, equally vulnerable, no matter what differences there are among us.

That is the message I found in Psalm 90, in Numbers and, finally, in the final words of the great speech Dr. King gave from this pulpit, 40 years and fifty-three weeks ago:

If we will make the right choice, we will be able to transform the jangling discords of our world into a beautiful symphony of brotherhood.

If we will but make the right choice, we will be able to speed up the day, all over America and all over the world, when justice will roll down like waters, and righteousness like a mighty stream.