

# Welcome This Early Spring      April 15, 2016

*By Dr. Alan K. Betts*

<http://www.greenenergytimes.net/2016/04/15/welcome-this-early-spring/>

When the Earth becomes vibrant again with life in spring, we welcome the change, and many feel a surge of joy and gratitude. I know that spring is very early this year – the daffodils bloomed in Pittsford in March, the earliest date ever. This is no surprise as winters are 10 degrees warmer when there is little snow. This past winter set record new temperatures globally, and we can expect a much warmer world in coming decades.

Globally, December was very warm, January broke that record, and then February broke the record again by a huge margin that surprised even climate scientists. The figure shows the average winter temperature anomaly in degrees Celsius (above the mean climate for 1951-1980). Notice the red patch of warm water in the eastern Pacific, related to the strong El Nino. But notice the red and brown colors across the northern continents and in the Arctic, where it was warmer than it has ever been in winter. It was so warm that even in the Arctic night, the sea-ice extent stopped growing a month early at a new record low in February.

For a gardener, but not for skiers, the warm winter was satisfying. The ground in my garden in Pittsford was unfrozen for parts of January, February (for the first time) and almost all of March, so I was able to dig my cover crop of rye grass. Unprotected spinach survived the winter, again for the first time. Under glass, lettuce and spinach thrived, and started growing by the end of February. The daffodils bloomed in late March. Putting all the pieces together I realized that spring comes nearly four weeks early, when there is a warm winter with no snow cover.

Can we embrace a changing climate, a changing Earth, with the same joy and gratitude as we welcome spring? This is not so easy. Because we fear change, many turn to denial. But because we are an integral part of the interconnected life on Earth, we must try; or we could slip into denial, fear or even despair at the changes ahead. And that is too bleak.

The political season is in full swing with a presidential election ahead, and the electorate is very angry with the failure of the federal government to address what they see as the real issues. But perceptions of reality differ widely, and accusations and blame are flying in many different directions. Yes, the political system works to further the interests of the rich and powerful at the expense of the poor and the Earth itself, and this must be challenged. But few look at the whole picture, where we all share responsibility for the future of the world we have created from our dreams and sense of entitlement.

But change is coming whether we like it or not – the Earth is so much more powerful than our civilization. Our dream of unlimited human power that came with the discovery of fossil fuels and nuclear fission is a mirage. We have to make the giant shift to both the acceptance of our responsibility for the future; and the realization that we must create a sustainable path for our civilization that recognizes our integral, inseparable relation to the Earth itself. And for this to

work we must accept new paths with gratitude and joy in the heart, rather than grudgingly regret that the dream has faded.

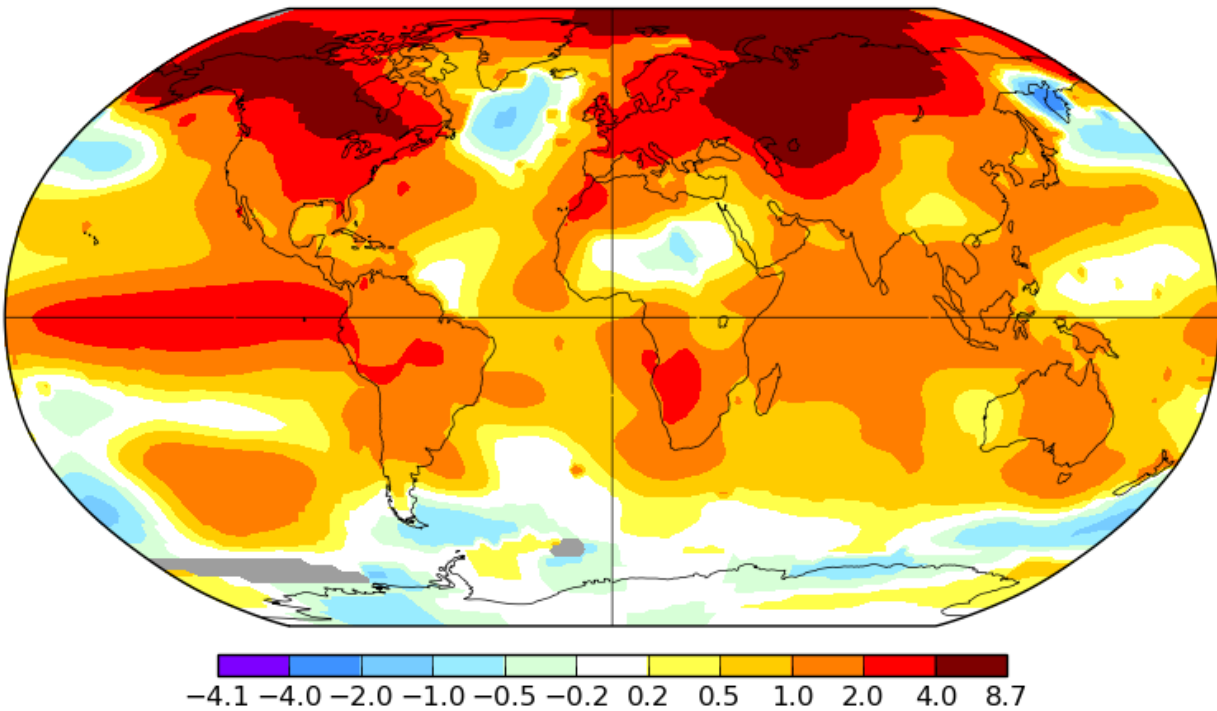
So it is spring and easy to start working with the earth. Go out and plant seeds, and watch them grow into a joyful harvest. Start to dream where we might go this year as communities cooperating with the soil, the sun, rain and wind. Can we and our families come closer to the Earth and its renewable resources so we can embrace change? And share what you grow and what you learn with your neighbors.

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Dec-Jan-Feb 2016

L-OTI (°C) Anomaly vs 1951-1980

1.2



**Difference map of mean 2015-2016 winter temperatures from the global climatology for 1951-1980 from NASA-GISS (downloaded from <http://data.giss.nasa.gov/gistemp/maps/>)**