Have you noticed? How rare it is in discussions about climate change, to hear people talk about population? Most of us know that when there are no effective controls on population of creatures in the natural world, the population grows until it outstrips its resources and suffers a huge crash. We learned about the function of predators in ecosystems, where, when one organism becomes too numerous, its predators also become more numerous and eat more and more until it comes back into balance.

We humans are amazing animals. The rapid evolution of our brains has enabled us to eliminate many factors that usually control population: our predators fell to our weapons; food scarcity was eliminated by cultivating food which also made us much more healthy and able to resist disease, and withstand harsh environmental conditions. We discovered and created medicines that can cure illnesses and prolong life. We created living spaces that shield us from extreme environmental conditions. We created complex cooperative societies that promote health and well-being. All of this has freed us from the constraints faced by other forms of life on earth.

Amazingly, it has long been noted that our resulting explosion of population and its plundering of earth resources cannot be continued forever. Thomas Malthus proposed in 1798, the theory that human population would soar until is exceeded the limits of nature and then would suffer a devastating crash. Recently, after the industrial revolution was booming, two books were published with much more concrete statistics: The Population Bomb, by Paul Ehrlich in 1968 and The Limits to Growth, in 1972, warning that humans were on a crash trajectory of overpopulation and should begin immediately considering how to change course.

Very recently, in the past 15 years, Lester Brown of the Earth Policy Institute began warning of the ways our civilization can collapse, and Jared Diamond published the book Collapse: How Societies Choose to Fail or Succeed documenting examples of such events from human history.

At this point, it is essential to frame what OVER-POPULATION is. It is when a population exceeds the ability to sustain itself because of its impact on its environment. The most obvious impact is its consumption of resources. Often, people in developed countries jump to a judgment of certain developing countries as being overpopulated based on the rate of growth of their population. This is a mistake. The countries consuming the greatest amounts of the earth’s resources are the most overpopulated ones. Guess which country is the most overpopulated then—yes. It is the USA.

Here are some figures—and they are alarming. David Tilford of the Sierra Club states that “with less than 5 percent of world population, the U.S. uses one-third of the world’s paper, a quarter of the world’s oil, 27 percent of the aluminum, 23 percent of the coal, and 19 percent of the copper.” He further reports, “our per capita use of energy, metals, minerals, forest products, fish, grains, meat, and even fresh water dwarfs that of people living in the developing world.

One of the most dire factors leading to the collapse of a society is the shortage of land to produce enough food. Few governments or societies can withstand a large-scale famine. Humans have already transformed most of the earth’s arable surface to agriculture. In doing so, we are destabilizing the natural ecosystems leading to increasingly major disruptions in food production. Shortages in food production are leading to mass emigrations that are destabilizing entire regions. We are now approaching the brink of the unthinkable—not enough food for everyone.

The biggest single factor responsible for all of this, is a word that is mysteriously absent from almost all discussions, the tiny one at the beginning of this article. (cont’d on page 3)
As we head into the new year, we have seen signs by the new administration that is shaping up, that many of the environmental gains we have achieved in the past ten years or more will be challenged, and attempts made to roll back the progress we have made. We will not be intimidated or lose heart for we know that this country has been able to get these policies and laws put in place through wide-scale grassroots organizing. Grassroots action will work in the future too, especially since the margin of votes the new president won by was thin in some key states. It will take a concerted effort by Sierra Club members to achieve this, in concert with other environmental and social justice groups. We have busy lives, but it is clear we must take the time to participate in these events, even more now than in the past, for us to be successful. We will use our local email list for our membership to notify you of important events planned so you can join us in demonstrations of support for the laws and policies we have struggled for so far.

Last year we emphasized the connection between exploitation of the environment and exploitation of people with our Forum on Climate Change and Agriculture. This year we move further down that road. Our efforts to protect the planet must include efforts to end the injustices that deprive various groups in our country and the world from fair access to resources that enable them to live healthy, happy and productive lives. Our keynote speaker for our 2017 Forum will be the man who was elected as the first African American President of the Sierra Club, Aaron Mair.

Aaron Mair, came to environmental activism via the social justice pathway. In the 1980s, he joined a fight to shut down a solid waste incinerator in Albany, NY. Plumes of polluting smoke from the incinerator swept over his home in an inner city neighborhood, sickening Mair’s young daughters and other kids in the neighborhood. His efforts ultimately led to the facility’s closure and a $1.6 million settlement award to the community. Aaron has worked as an epidemiological-spatial analyst with the New York State Department of Health. He will speak about the ways in which we must address the history and policies that led to the divisions and injustice in our society today to successfully mitigate climate change and protect our planet for the future. We are excited to bring Aaron here and will have more detailed information about our Spring Environmental Forum in the next Ecologue. Once again we thank you for your love of our planet and support for the Sierra Club to preserve our planet for future generations. We have used a significant amount of our resources to bring speakers of note to help us move forward in Rochester, and if you are able to make a special end of year donation to support our work, we certainly appreciate it.

Peter Debes
Visions of A Possible Future
by John Kastner

Most Americans now accept that the climate is changing in dangerous ways and that some kind of action is called for. Scientists and environmental leaders tell us that to reduce the impacts of climate change we will have to reduce emissions of greenhouse gasses. This means reducing our consumptive habits and our consumptive population. Those in government who accept that climate change is a serious problem are desperately trying to look like they are doing something without changing anything. Witness our net increase in greenhouse emissions because President Obama’s initiatives to reduce carbon were more than offset by an increase in atmospheric methane due to his continuing support of fracking. We can expect much worse from Trump.

No one in Government is telling us that we must change the way we live on the earth. In order to do this we must change the way we personally conduct our daily lives. No environmentalist that I have read, and no politician that I know of has dared to articulate what this might look like. So, let me rush in where the wise “angels” fear to tread.

The short answer is that what made us successful as humans through thousands of years of evolution was close cooperation between members of small, genetically similar groups. The individuals in these groups depended on each other for their collective survival. They worked, played, loved and cared for each other. From the beginning we were altruistic, courageous, self-sacrificing and generous.

Now, fast forward 200,000 years to the invention of civilization and another 100,000 years to the modern industrial era, then another 50 years to the electronic age and what emerges is a society of lonely, solitary individuals or fortress like nuclear families whose desperate battlements are crumbling. We have very swiftly gone from a communal culture of mutual support to a society of cultivated “rugged individuals” guided toward mass consumption of products that promote the illusion of this identity. When we have had enough of the stress such living produces, we run away, by ourselves, to some little cabin in a corner of an illusory “wilderness” that few us still know well enough to support ourselves on. It’s no wonder that all the drugs we take sell as well as they do.

Clearly evolution did not design us to live like this and its not doing the other species we (don’t) share the planet with much good either. Our psyches are not adapted to coping with modern civilization any more than the natural systems that sustain us are able to cope with all the ways we have transformed them. But it can be different than the way it is now. We need to envision ways we can transform our living situations to recreate the conditions we function best in, with the least impact on our environment.

One way some people have been experimenting with this is in communal communities. I lived communally for many years. The best experience was in a big house with fifteen people and 2.5 bathrooms. Everyone had their own room (however small) or shared one with their partner. We shared meals, chores, projects and good times together, and supported each other through crises and hard times. I count it as one of the best periods of my life. There were many musicians and much good music. The composition of the communal spaces constantly changed along with the interesting conversations and solace was readily available. Most of us gathered together for dinner at 6:00pm, which you personally were responsible for preparing only once a week. All diets were accommodated.

Population: Shhhhhhhh: It’s Face Up Time (cont’d from page 1)

As the most overpopulated country on earth (as explained above) we must be engaged in serious efforts to cut our population growth and even allow it to decline. This is a major challenge since our whole system continues to be based upon growth. Many have strong religious reasons for not discussing it. We can’t even agree on supporting family planning. When I was younger, my spouse and I decided to only have two children as our contribution to allow a sustainable future. Now, even this number will not prevent a crisis.

We humans must start these conversations everywhere very soon and lead the way by example. As we do, we have to be conscious of our history of scapegoating members of other racial groups as a solution to the crisis. If we do not control our population wisely, it will be controlled by Nature in ways we do not even want to imagine. Be courageous. Make a commitment. It’s time to talk about…..POPULATION.

See: Daniel Farber, Sustainable Consumption and Communities: Bringing the American Way of Life into the Twenty-First Century, 29 Pace Envtl. L. Rev. 344 (2011)
Privacy was easily obtained by closing the door to your room. An open door was an invitation for company. This arrangement required tolerance, consideration, respect, flexibility and generosity. The return on this investment was cheap, environmentally efficient living, a sense of belonging and fun. Even more than these attributes we gained an extended family. I grew to love these people and my son was the beneficiary of the love and attention of people from all over the world. We were Americans, Australians, Brits, Canadians, Salvadorans, Hondurans and Africans.

Most people's initial response when I relate this story to them is..."God, I could never live like that. I need my privacy." It's truly hard to awaken our tribal roots in a society where it is so easy to have it all your way at the expense of all the rest of life on earth. And yet, it's as old as our genes and it's wonderfully environmentally efficient. Now can you imagine entire neighborhoods organized this way with ten vans instead of thirty cars, a half dozen lawn mowers and snow blowers instead of thirty? Can you imagine tool banks, libraries, a community garden and recreation center where entertainment becomes a shared experience? Can you imagine several such neighborhoods coming together to form food co-ops, small banks, second hand stores, repair shops, restaurants, medical centers, radio and TV stations? A community where money spent there stays there creating a more resilient economy. If this sounds like a utopian dream I would respond that all the comfort we now enjoy began with dreams, even though many of these comforts have not been good for us. Personally, I don't believe in utopia. Life, by its very nature, will always be hard, but it can certainly be more fun and healthier for our minds. There will always be those who want more as opposed to those who want more. The desire for more tends to separate us more than it brings us together. It doesn't appear to have made us any happier and it's probably made us a good deal sadder. In any case, the planet simply can no longer afford it.

It will take a lot of hard work to rediscover our best selves as cooperative beings. We must first break the hold that the tyranny of money has on our democracy. There are many efforts already underway on this problem. New taxes on obscene wealth and reallocation of equally obscene amounts of money wasted on the military need to be directed toward renewable energy, rebuilding our crumbling infrastructure, public transportation and providing seed money to being building some of the humanistic foundations I've described here. We must build an economy based on cooperation rather than consumption, on sharing rather than self-indulgence. It will require a vigorous, sustained media campaign and educational programs to persuade people that this is the path to solving our problems and achieving some of our much sought after happiness. This is not the work of a single presidential administration or even a single generation. This is a new vision, a better vision, to direct our efforts toward a more sustainable and satisfying way of life. It is the work of a nation lead by people at every level of society who share such a vision and who can inspire us to work toward realizing it.

Change is coming, with us or without us. The only question is, do we love life enough to adapt to it. If you do, don’t despair. Roll up your sleeves and get busy!
**How Good Does It Taste?**
**A Halloween First at the Public Market**

On Sunday, October 30th, the Rochester Public Market held its first Halloween Eve at the Market Event. Without much notice and on a cold rainy night expectations were low. Sixty participating organizations were asked to give out candy in a manner that encouraged children to “sing for their supper” by participating in an activity for the treat. Alison Clarke and I did Tap Water vs. Bottled Water Taste Testing on behalf of the Sierra Club Great Lakes Committee and the Human Rights Day December Event Planning Committee. We were completely overwhelmed with the enthusiasm of the ghosts and pirates and skeletons!

We later found out that 2,500-3,000 kids of all ages as well as parents came to the event! We ran out of cups, water and candy by the end of the two and a half hour event! Hundreds of families stopped at our table. It was wonderfully crazy! Key to our success was a 45 second “elevator speech” that we gave over and over about the benefits of tap water and environmental issues with bottled water for everyday use. Regardless of which “water” they preferred in our taste test – the message about bottled water came through. People seemed interested and engaged. Rochester is fortunate to have the Rochester Public Market as a city resource, providing not only local food and products, but opportunities for community groups to get beyond the “choir” and engage face-to-face with the wider Rochester community. I encourage other Sierra Club committees to consider participating next year.

Kate Kremer,
Great Lakes Committee, Chair

Kindergartners from the Rochester Children’s School learn about trees in the Washington Grove, an old growth forest at Cobbs Hill Park being protected and restored by a project begun in 2008 by Peter Debes of the Sierra Club.
On Buying or Leasing an Electric Car: What Works for You?

by Jeff Debes

You’ve seen them on the road: Electric (EV) cars are becoming more common. And good news: In New York State, a purchase and/or lease rebate will soon be offered, and significant Federal tax rebates are already in place for plug-in EVs. Electric powered cars are beginning to take the place of the dinosaur-age fossil-fuel powered versions.

So, perhaps you really like the idea of driving a quiet, zero emission, low-cost EV to work, or to the store, or even on an intrastate trip? I’d also love to do those things in an all-electric vehicle. However, is it really possible to do that? The answer is: Yes, but only “sort of.” What do we want and need as auto buyers or lessees?

We all have our own requirements for our future mode of transportation, and hopefully, these will be fulfilled when we choose to purchase or lease. Our requirements include items such as purchase price/cost, environmental impact, trip range, reliability/quality, low energy use, aesthetics, comfort, size, acceleration, long warranty period, etc. We have other requirements that we often take for granted.

While EVs provide many advantages over fossil-fuel powered cars, electric-only EVs have a few significant disadvantages:

Lack of Usage Flexibility

Most people who own or lease and that have only one vehicle in the household prefer one that will allow them to drive long distances, e.g., from Rochester to the Adirondacks. Given that electrics initially cost up to $15,000 more than reliable, economy-class fossil-fuel equivalents, an electric car with limited range and inconvenient refueling is a non-starter for many buyers. For owners of two vehicles, perhaps a local-use EV vehicle would seem acceptable and would solve the flexibility problem. But even owners who normally own two vehicles may shy away from electric-only options. Again, flexibility of use is very important to most drivers.

Higher Purchase Costs

Electrics have somewhat higher purchase prices than fossil fuel autos. Even with the federal tax rebates and the proposed (modest) state purchase rebate, most electrics and hybrid cars will be too expensive for economy class car buyers.

Conclusions

Good News: If you are interested in owning or leasing an EV there are some very good deals available. A combination of state, federal and local sales (TBD) rebates/tax exemptions on leased or new EVs can make them more affordable.

Plug-in EVs with gasoline backup power are also an excellent option. These models solve the versatility issue while allowing the owner/lessee to avoid the use of fossil fuel while in urban areas like Rochester. Some makes and models are: the Chevy Volt, the Toyota Prius Plug-in and the BMW i3 (with range extender).

You might also consider a pre-owned plug-in EV like the Chevy Volt. These may be purchased in the 10-17 thousand dollar range and still have 4-8 years of remaining drive-line warranty. If you are interested in one, be sure to consider only those covered by the drive-line warranty for the length of time you plan to own. Test drive a fully charged EV before making a deal to check for good battery-only drive range. Chevy Volts and Toyota Prius’s have a well established reliability record. The drive batteries (and drive-line) in these and other EVs are warranted for 150,000 miles or 10 years. This robust warranty applies to new and used EVs purchased and serviced in New York State.

Note: Car dealers may tell you that the main drive battery on a New York purchased EV is warranted for only 100,000 miles and 8 years, this is incorrect.

If you have questions or would like to discuss EVs, you may reach me via email at jeff.debes@gmail.com.
Climate change is the greatest crime against humanity ever committed. It is human rights abuse on a scale heretofore unknown.

It is 36 degrees above normal at the North Pole as I write this. And this is in the near total darkness of the approaching solstice. Greenland is melting as almost every glacier on earth retreats. Every year is hotter than the last. The oceans chemistry changes as its temperature rises and it absorbs carbon dioxide. The oceans have absorbed a majority of the carbon dioxide we have released into the atmosphere and warming has penetrated deep below the surface. Tests of its ability to absorb more show that, soon, it will be unable to do so. It’s acidity will render it nearly lifeless, as the food chain collapses and large species die off. The oceans have been our first line of defense against climate change. They are about to fall and the full brunt of our folly is nearly upon us.

We are on the verge of catastrophic methane releases from the melting tundra and warming oceans. Heat waves, droughts, floods, hurricanes and El Niño are bigger and deadlier than ever before. Extreme weather all across the planet is the new norm. Most of us see it when we look out our window.

Nearly two hundred nations are meeting in Marrakesh Morocco to advance the efforts to stop climate change. Governments, businesses, scientists, citizens and even the U.S. military are united in acknowledging a climate emergency. The leaders of the world will stand united on this issue. As will the vast majority of it’s citizens.

We have just elected a president who denies its existence. Who has said he will...Aid and abet the plunder of the planet as never before...Extract and burn every fossil fuel available...Appoint industry lobbyists and insiders to administer the public wealth to their own advantage...Use fear to distract you while they pick your pocket and sell out the future of every person alive or yet to be born. Unless we stop them!

Increased coal production, offshore extraction, fracking, petroleum export, pipelines, reduction in spending on renewables, withdrawal from international climate accords and many other environmental disasters are promised.

Elimination of regulations and undoubtedly reduced enforcement are to be expected. The EPA may be eliminated. Clean air and water, basic human necessities and human rights, will be sacrificed to short term monetary gain. The plan is to defund the Earth Sciences division of NASA and restructure them on deep space. Study planets people will never get to because we stopped studying the one we all live on and depend on for survival. Who does that serve? Humanity or special interests. The children of the future or the rich and greedy of the present? This is just the beginning. Limited only by their imaginations, it can not be known how much of the future their depravity will steal.

A select few will benefit now. Many generations and billions of people will be footing the bill. It is a crushing price for humanity to pay. The immorality, greed and ignorance of those who have bought the power to change the future know no bounds. Unless we set them!

The future of the entire world is in the hands of those who resist their agenda. Movies and other fiction are full of epic adventures to save the world. Who will the heroes be in this real life epic? Will it be you? It must be all who have the morals and ethics to look beyond themselves. It must be all who can resist. When the streets are filled with peaceful people demanding justice for all, and not relenting, we will win.

It would have taken this no matter who was elected president. It’s just easier to see now. The future has been bought by the rich and powerful. It is up to us to declare it was not for sale.
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Winter 2017 Calendar
All Committees are local volunteer groups of the Rochester Regional Group of the Sierra Club.

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Meeting/Event</th>
<th>Place</th>
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</thead>
<tbody>
<tr>
<td>January 3</td>
<td>Tuesday</td>
<td>6:30-8:30pm</td>
<td>Executive Committee Meeting</td>
<td>Harro East Bldg., 400 Andrews St., Ste 600</td>
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<tr>
<td>February 7</td>
<td>Tuesday</td>
<td>6:30-8:30pm</td>
<td>Executive Committee Meeting</td>
<td>Harro East Bldg., 400 Andrews St., Ste 600</td>
</tr>
<tr>
<td>March 7</td>
<td>Tuesday</td>
<td>6:30-8:30pm</td>
<td>Executive Committee Meeting</td>
<td>Harro East Bldg., 400 Andrews St., Ste 600</td>
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Follow us on Facebook to keep up-to-date on new events throughout the year.
www.facebook.com/SierraROC

Executive Committee meetings are open to Sierra Club members. All other meetings are open to everyone.

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