

THE ENGAGED SIERRAN



CONCORD MARKET DAYS

Opportunities abound to spend time with other Sierra Club members and connect with new people. Market Days are in progress right now - and **you can still volunteer** to represent the Sierra Club on Saturday, July 20!

Email Lauren Kilmister (pictured, left) at Laurenk823@gsinet.net if you'd like to volunteer for Market Days.

Even if you can't volunteer, we'd love to see you! Stop by the booth and say hello.

JOIN THE SIERRA CLUB ON THE SWEET TRAIL

Sunday, September 1

We will enjoy an easy, mainly level 4.6 mile morning walk past attractive fresh and salt water wetlands. This surprisingly wild area so close to civilization was saved from ruin by a proposed huge oil refinery! No dogs are allowed in this nature reserve.

The Sweet Trail is part of the Great Bay area of the seacoast. The Great Bay area is a unique inland ecosystem supporting more than 150 rare plants and animal species and 55 exemplary natural communities. The Sweet Trail showcases some of the natural communities and diverse habitats protected by the <u>Great Bay Resource Protection Partnership</u>.

For more information on the Sweet Trail, view this PDF.

Kids with hiking experience welcome! Insect repellant a must! We will lunch at the end of the trail at a great spot overlooking Great Bay. RSVP with Leader Peter Hope, (603) 863-6456.

JOIN AN ACTION TEAM!



NH Chapter Action Teams are active in seven different areas: Climate Change, Fundraising, Outings/Events, Tar Sands, Transportation, Renewable Energy and Volunteering.

Each team is tasked with holding meetings and taking steps towards self-specified goals – which means lots of opportunities to get involved! Email Lauren Kilmister at Laurenk823@gsinet.net or call 224-8222 to become one of 10 members allotted for each team.

DON'T FORGET THE CO₂

By Nancy Byrd

Many environmentalists have watched in dismay the horrific events happening in Lac Megantic, Quebec. What can be our response to errant rail cars attaining projectile speed, derailing and exploding crude oil, fracked from the Bakken shale? We may stop Keystone XL or prevent the Portland Montreal Pipeline (PMPL) from reversing direction. But will doing so help us to stop increasing the CO₂ content of

the atmosphere and ocean? Sadly, the events of this week demonstrate that the answer to this question is "no" if one mode of transportation merely replaces another.

This week, conversations have turned to questions of transportation safety: which is safer, rail, pipeline or truck? This is a game that the oil companies must be happy to see us play. We have turned our attention from the knowledge that the CO₂ contribution of Tar Sands is three to five times that of conventional crude. We forget that the Bakken Shale oil, which destroyed Lac Megantic, was not profitable until fracking recently made it so. Bakken Shale oil is comparable to lignite, the lowest form of coal. The carbon emissions from the production and transport of this fuel are not much better than those from Tar Sands and the adverse impact of the fracking fluids on local environments is alarming.

Assuming fuels free of contaminants, burning methane follows the following equation: $CH_4+2O_2 -> CO_2+2H_2O$; burning coal results in the following reaction: $C+O_2 -> CO_2$. Either way the end product is CO_2 . Even if you start with the cleanest of fuels, burning fossil fuels creates abundant CO_2 in the atmosphere.

Why is CO₂ bad? It's not bad in small quantities, but CO₂ is a greenhouse gas and thus warms the planet. Moreover, it dissolves in the oceans making them acidic. CO₂ is very stable. It won't decompose like methane or rain out of the air like water does. Excessive CO₂ is bad because once in the atmosphere it will take 1,000 years for natural processes, like photosynthesis, to remove it. In short, it will warm the planet for a very long time.

Let's not get sidetracked by transportation comparisons. They are important, but it's the excess CO₂ that we need to stop.

Nancy is an established environmental blogger from Mirror Lake, NH. Look for more of her articles in future issues of The Engaged Sierran, or on our <u>website</u>.

STAY COOL IN STYLE - USE SIERRA CLUB MERCHANDISE

It's important to stay hydrated during these hot summer days, and what better way than with Sierra Club hats and water bottles? We now offer 100% Organic Cotton hats, BPA-free Camelbak water bottles, and stainless steel water bottles and tumblers – all complete with the Sierra Club logo! Come visit our tables at the **Concord Market Days**, or call 224-8222 to get yours today!



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