"The Party's Over: Oil, War and the Fate of Industrial Societies"

by Richard Heinberg ISBN 0-86571-482-7 www.newsociety.com

"Resource Wars: The New Landscape of Global Conflict"
by Michael T. Klare ISBN 0-8050-5576-2

Everyone should read "The Party's Over: Oil, War and the Fate of Industrial Societies" by Richard Heinberg. I would imagine most Sierra Clubbers are already somewhat familiar with pieces of the subject matter brought up in this book, and more detailed technical accounts for many of the subtopics can be found elsewhere. Yet I can't remember where I've come across a more coherent overview of the Big Picture we face; perhaps Jeremy Rifkin's "Entropy: A New World View" or William Catton's "Overshoot: The Ecological Basis of Revolutionary Change" compare. But "The Party's Over" is as contemporary as the latest casualty in Iraq. Heinberg explores aspects of the coming energy crunch most of us have never thought of, such as the dysfunctionality of a financial system based on borrowing and compound interest in a world where energy availability is no longer growing.

Biological systems and ecology ultimately boil down to an exchange of energy. Heinberg examines entropy, ecological succession, pioneer species, climax ecosystems, population blooms and diebacks, evolution and extinction. He then applies these same principles to understanding the rise and decline of human cultures throughout history.

The key concept is net energy, or energy profit. It takes energy to acquire energy. It requires energy to pump oil, mine coal or manufacture solar panels. The question has to be: do you get more energy in return than you exerted in the process of acquiring it? Obviously if you end up losing more energy in the process than you gain (an energy sink) the process can't continue. For example, oil fields that are near the surface tend to have a high energy profit because comparatively little energy needs to be expended to extract the oil relative to it's energy content. That oil is therefore "cheap" in both dollar and energy cost. However as the field becomes drained or new fields are discovered that are deeper or otherwise more remote and difficult to access, their energy profit will be lower because more energy needs to be spent in the extraction process. This oil will then be more "expensive." Most of the "cheap" oil left in the world is concentrated in the Persian Gulf, and to a lesser degree the Caspian Sea region, parts of Africa, South America and the South China Sea. The author also examines other energy sources including coal and other fossil fuels as well as nuclear and renewables. All contain less net energy than oil.

In 1956 petroleum geologist M. King Hubbert accurately predicted US domestic oil production would hit it's peak around 1970 and decline thereafter (see *Scientific American* March 1998 "The End of Cheap Oil"). Ever since 1970 the US has grown increasingly dependent on importing more oil from foreign sources. Hubbert's followers have predicted the peak in global oil production is not that far off, probably around the 2006-2015 range. Once the global oil peak has passed the net energy available to human society will begin to shrink.

Yet the author is not a fatalistic doomsayer. He believes a steady state society (climax ecosystem) is entirely possible, but cautions that the prospects of getting to there from here will be extremely difficult and are becoming progressively moreso the more we continue to delay. A central point is that energy will be required in order to construct a post-fossil fuel infrastructure that can be supported by renewables. We have a very narrow and rapidly shrinking window of opportunity that we are frittering away trying to support the status quo. Even if the predicted time frame for the oil peak should be off by several decades, the same pattern holds.

Michael T. Klare's "Resource Wars: The New Landscape of Global Conflict" is a useful, though secondary, supplement to "The Party's Over." This is a more in-depth look at the specific geography of: first of all the quest for oil, but also (primarily among less industrialized countries) conflicts over such basics as water, land and timber resources, plus minerals and gemstones - and how all these tie in together.

The two can be bought together for a discount at Amazon.com. On the other hand if you buy directly from New Society Publishers a portion of the proceeds goes to support the work of Movement for a New Society. Hopefully they can be found in your local library and am I am more than happy to loan my personal copies to club members.

David Sprowls
Dvsprowls@msn.com