CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (12 December 2012)

President Dean Snow called the meeting to order at 7 p.m. Roy Hammerstedt introduced his guest, John Wainwright, and Gordon DeJong introduced his wife, Caroline, and also reminded the members to use our new brochure as a means of recruiting new members.

Dean introduced the speaker, Gary Petersen, who has been teaching a three-credit on-line course, Soil Science 101, this fall for Penn State's World Campus. Using a computer to illustrate his instructional methods, he showed how on-line instruction enables him to introduce the principles of soil science to sixty geographically dispersed students of various ages and academic levels. Although he was initially skeptical about the efficacy of this new method, compared with conventional classroom instruction, Gary has found that on-line instruction can be used to impart information, illustrate the principles with still photos, videos, and maps, examine the students (five times during a fifteen-week course), and provide "labs" that provide hands-on experience with soil gathering, analysis, and testing. All the students may choose the times when they access the lectures and the reading assignments (which are on electronic reserve), perform the labs, and take the examinations. They may correspond with him and with their classmates and in fact have done so often. Many of the issues covered in Gary's course include erosion, the effects of "fracking" and of mining, the positioning of new buildings, precision application of fertilizer or pesticides, farmland preservation, water quality, food security, and even the misguided development of ethanol as a petroleum substitute. Some of the students are enrolled in resident instruction at Penn State, but most are taking this course through the world campus and live in 29 American states and two Canadian provinces. Students are required to make a land use plan for a 4,000-acre site, which may be anywhere in the world. Gary, a retired professor, has traveled widely and hence is familiar with many different states' and countries' soil conditions. Eleven questions were raised by other members: tuition fees for the course, how it compares with traditional correspondence courses, timing of tests and prevention of academic dishonesty, enrollment capacity, application of this instructional method to more advanced work in soil science and other disciplines, problems of using Angel as a course management system, future technological obsolescence, how student possession of laptops has increased flexibility, the effect of wireless connectivity on the quality of class discussions, and the possibility of getting away from the fifteen week semester.

Meeting ended at 8:05. Attendance: 21 members, 2 guests.

Respectfully submitted, Art Goldschmidt, Secretary

No January minutes available

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (February 13, 2013)

Gary Miller, presiding in the absence of President Snow and Vice President Vincenti, called the meeting to order at 6:40 p.m. The following guests were introduced: Marylee Taylor, Joyce McKay, Mary Bruce Serene, Jack Matson, Elizabeth Goreham, and Louise Goldschmidt. Miller then introduced James Serene, who spoke on "Solar Power, 2013 and Beyond." Serene has been familiar with solar power at first hand since 1980, when he installed his first solar panel. He later built a house in Charlotte that abounded in passive solar energy systems. He understands how solar power works and has invited Jack Matson, the founder of a green design company in State College called Envinity, to attend as a resource person.

Serene argued that America's dependence on fossil fuels puts our security at risk, citing Anthony R. and L. Hunter Lovins' *Brittle Power: Energy Strategy for National Security* (Brick House, 1982, reissued in 2001), which was well received when it came out, but its case for developing renewable energy sources was ignored during the Reagan and Bush administrations, which believed that fossil fuels such as coal, oil, and natural gas remain plentiful and cheap. Consequently, we consumed 19 million barrels of oil <u>per day</u> in 2010 and the value of our daily oil imports amounted to \$1 billion. Our dependence on imported oil from Saudi Arabia, Nigeria, Iraq, Algeria, and Colombia puts us at risk. We spend \$20 billion per year just to defend the Persian Gulf shipping lanes. Our government subsidizes fossil fuel extractive industries, which have spent a billion dollars since 2000 just to lobby against solar power, and even nuclear power companies spend millions to campaign against what it calls "intermittent power." During the 1980s the oil companies bought up the firms working on solar energy, then closed them down. Even the Koch brothers have fought against solar power, and during the recent presidential campaign Romney misrepresented Obama's solar power initiatives, averring that 50 percent had failed (the true figure was below 5 percent).

Despite all these efforts, solar power will grow at the expense of fossil fuels because we need it. Serene showed slides reminding us of the melting icecaps, but solar power has many uses, not only for heating water, but also photovoltaic cells that produce direct current electricity. Many companies are making charging stations, cars, motorcycles, snowmobiles, trucks, and buses. Solar power is now used in military installations, e.g. 60 percent of the power used by the Philadelphia Navy Yard is solar. Serene showed pictures of solar "farms" from the American West, which operate even when the sun isn't shining. Solar power can be concentrated for the generation of steam to produce electricity, just as fossil or nuclear fuels are used. During the great storms like Katrina and Sandy, electrical grids can break down, but solar power can be harnessed locally.

Serene showed how European Union countries, notably Germany, are adopting solar power to generate electricity. He displayed bar graphs that show how China has taken the lead in solar panel production and will soon become the world's leading consumer of solar-generated electricity, far ahead of the US, which continues to rely mainly on fossil fuels, none of which will last forever, whereas the sun should last for at least another five billion years. Yingli Solar, founded in 1998, has become the leading producer of solar panels. Its production costs have plummeted since 2000, so that US companies cannot compete with it. He predicted that the US will lose in solar panel production as it has in steel, textiles, furniture, and other industries where it once led the world. In terms of installation cost per kilowatt hour of energy produced, solar panels are more economical than the cost of building coal, natural gas, or nuclear-powered electric generating plants. Solar panels can be placed anywhere, not just on roofs of buildings, and they don't require pipelines. Most manufacturers are developing electric cars that will depend on solar-generated electricity. A bar graph projecting future energy sources in the US predicts continuing growth of photo-voltaic cells but coal and natural gas will go on being major players. Penn State's extension service has a website about solar power. The US Department of Energy has a program to reduce production costs to lower solar power generation costs to below fossil-fuel generation costs by 2020, but it needs finance, streamlining, and cutting red tape. The US needs a uniform coding system, like what other countries have.

A lively discussion ensued on solar power: what US companies are consuming it; to what extent is it or should it be subsidized; are present batteries adequate for storage of solar-generated power; what does it cost to install

a domestic solar power system; how does solar power compare with geothermal power; how does solar power work in Germany; the high cost of fossil fuels in Europe; political obstacles in spite of growing interest by the American people in solar power; the use of solar energy by private firms such as Walmart; the size and scale of domestic solar panels; the need for research on photovoltaic devices and batteries to make them more efficient; the establishment of charging stations on interstate highways as electric cars become more common; how economic is solar relative to fossil fuel power in domestic or commercial use; and the relative efficiency of incandescent, fluorescent, and LED lighting; the need to stabilize the climate; and the need to develop batteries that charge more rapidly.

Roy Hammerstedt gave a brief introduction to the talk he will give in March about personalized medicine. Despite the snow, 16 people attended the meeting, including six guests (at least one being a potential new member). The meeting adjourned at 7:45 p.m.

Respectfully submitted, Art Goldschmidt, Secretary

No March minutes available

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (10 April 2013)

Treasurer Clifford Bastuscheck, acting on behalf of President Dean Snow, who was absent, called the meeting to order at 6:40 p.m. to announce that the chocolate sheet cake on display was to honor Jack Hargleroad on his 91st birthday, which was today. Art Goldschmidt will represent the club at this year's convention. Pete Cole was approved for membership. Gary Petersen introduced Dr. Louis Persec (a radiologist with specialization in nuclear medicine) as his guest.

John Vincenti, who lectured on "Advances in Prostate Cancer Treatment," also introduced his guests: Cyndi "Lou" Vincenti, his wife; George and Debbie Trudeau; Ned and Inge Book; Bob Fogarty; and Louise Zawadzki. All of them, and many others whom he also named, have helped him in his fight against prostate cancer. The prostate is a gland found only in males, grows gradually throughout a man's lifetime, many older men suffer from BPH, and it is highly likely that most older men have prostate cancer, often without knowing it. During 2012 it is estimated that 241,740 new cases occurred, of which about 28 thousand are likely to prove fatal, for prostate cancer is the #2 killer of American men. The prognosis depends on whether the cancer has already spread. Because of an article recently published in Consumer Reports that questioned the efficacy of Prostate Specific Antigen testing as a means of diagnosing cancer, Vincenti argued that so far only regular PSA testing can identify whether a man's prostate cancer could spread. Every man should know his PSA score and beware if it suddenly rises. Treatments include prostatectomy, cryotherapy, brachytherapy, high intensity focused ultrasound, x-ray and gamma ray therapy, and the treatment Vincenti got, which was proton therapy, a relatively new technique that (judging from the picture John showed) exposes body parts other than the prostate to less radiation than older methods. He referred to Robert J. Marckini's book You Can Beat Prostate Cancer and You Don't Need Surgery to Do It (2006) and urged any man to undergo regular PSA tests, get a biopsy if the score rises faster, confer with his family doctor or a urologist, and even get a second opinion if need be.

Vincenti chose to consult a doctor at the University of Pennsylvania who prescribed a bone scan (done in State College) and 2 MRIs, which found that he indeed had two tumors, both on a scale severe enough to require treatment if he wanted to survive. After undergoing a colonoscopy, bone scan, MRI, hormone pills, visicoil implant, and CT simulation with markers, Vincenti underwent 44 proton treatments in the Roberts Proton Therapy Center at the Hospital of the University of Pennsylvania. The treatment was non-invasive, amounted to 30 seconds' radiation on each side. He suffered no fatigue, loss of appetite, incontinence, depression, fear, or apprehension, nothing except a slight reddening of his skin; but other patients may experience some of these effects. HUP communicates fully with patients and their families (and home doctors and hospitals). Since his treatments, which ended 27 February 2013, he has continued the hormone pills and also had various forms of alternative medicine: reiki therapy, yoga, acupuncture, nutritional classes, and meditation. Most of the cost was borne by Medicare. At the time proton therapy began (2006), the cost was \$600-1500 per treatment; this should decrease. Vincenti gave a history of nuclear research, the cyclotron, radiation therapy for cancer, and proton therapy. Other applications include pediatric, head and neck, brain and cranial base cancers, tumors of the eye and orbit sarcomas. He told about his 12-year-old basset hound, Isaac, who was diagnosed last November with spleen and liver cancer. The vet gave him 30 days to live, but Isaac remains alive due to the treatment he has received. He put on a cap that says "Proton John," read a poem entitled "Radiating" written by Louise Zawodzki, and told how he rang the Roberts bell upon his cure. The chief marketing officer at Roberts turned out to be Suzanne Harbolis Slater, whom John had taught in State College Area High School. In the ensuing discussion, we learned that his PSA score, which had risen from 0.9 in 2007 to 9.7 in 2012, was now 0.05. Dr. Persic affirmed that Vincenti had made wise decisions, but the cost of proton therapy for every man would be prohibitive. Frank Deutsch noted that one should note a rapid rise in the PSA and suggested that the patient or physician should graph the scores. Similar arguments are happening regarding mammograms for women at risk for breast cancer. Gary Peterson noted that men used not to talk about cancer.

The meeting adjourned at 8 p.m.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (May 8, 2013)

President Dean Snow called the meeting to order at 6:45 p.m. The election of new club officers will take place in the June meeting. Jim Sullivan, who is the EMC Insurance Company Market Representative for Pennsylvania, introduced himself and guests Leslie Sullivan and Louise Goldschmidt, and went on to introduce Employers Mutual Casualty Company, headquartered in Des Moines, and its role in providing property and casualty insurance to companies throughout the US, the premiums just in 2012 amounting to \$1.35 billion. Jim outlined briefly the history of property and casualty insurance (viewed as sharing risk) from its origins in ancient China and Mesopotamia and especially since the Industrial Revolution. The expansion of modern industry has expanded the need for insurance. He focused especially on how employers are liable to pay compensation for bodily injury to workers, noting changes since antiquity, and the growing need for insurance to cover these claims. He cited various cases and acts of Congress pertaining to employers' liability, as well as an "unholy trinity" defenses used by employers to shield themselves from having to pay compensation. In England and the US Common Law used to protect employers against workers' suits, but with the growing complexity of modern industry, the increasing number of firms and of workers, and the greater risks of mining and manufacturing in modern times, some form of worker protection was needed. Prussia (and Germany) under Chancellor Bismarck pioneered in legislation that insured workers against loss of earning capacity due to injury and old age. Britain under Prime Minister Gladstone followed suit in 1885 and 1897, although Common Law and practice continued to permit workers seeking jobs to sign "right to die contracts," which exempted employers from paying any compensation to an injured worker.

Legislation in the US occurred later, due in part to our federal system. Wisconsin in 1911 was the first state to mandate comprehensive workers' compensation; Pennsylvania did so in 1915; and Mississippi did so only in 1948. Early laws specified how much doctors and other caregivers might receive for treating an injured worker. Some states created compensation boards; others required injured workers to sue in the courts. Over time, occupational hazards and repetitive injury got added to the causes for workers' compensation, and "impairment" came to be distinguished from "disability." Legislation has to cover whether compensation for loss of earning should be in the form of a lump sum or the payment of 2/3 salary. "Second injury funds" are needed in case a second on-the-job injury leads to incapacitation but must beware of fraudulent claims. Changes in the Social Security Act (1935) and, most importantly, the Americans with Disabilities Act (1990) have affected the work environment and hence the risks for employers, increasing their need for insurance against claims regarding medical costs, disability, rehabilitation, and death. The states vary in how they provide insurance: most are NCCI states, some (like Pennsylvania) have independent bureaus, a few states are called "monopolistic" and set their own rates. Some industries, e.g., federal employees, coal miners, and workers in very hazardous occupations are subject to special legislation. The US now has a large workers' compensation industry, employing 2.5 million workers and involving about two thousand private insurance companies. Included are claims adjustment, risk reduction, actuary, injury management, medical claims, underwriting, legal representation, fraud detection, and claims reporting.

Questions from the audience included the role of Pennsylvania coalminers; working from home in cases of partial disability; how experienced employers can rate types of disabilities; fraud investigations; the eligibility of undocumented immigrant workers; state liability in cases where employer negligence was clearly at fault; insurance for truly dangerous occupations, implications of Pennsylvania Act 46 signed in 2011 by Governor Corbett for state funds, municipalities, and insurance companies; the probable effect of the Affordable Care Act ("Obamacare"); and Penn State's history of carrying insurance for its workers.

The meeting adjourned at 8 p.m. 13 members and 2 guests attended.

Respectfully submitted, Art Goldschmidt, secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (June 12, 2013)

President Dean Snow called the meeting to order at 7 p.m. and announced Cliff Bastuscheck's retirement as club treasurer. Cliff reported that our treasury had a balance of \$2,457.42 as of 31 May, sufficient for us to avoid monthly bank charges. Paulette Berner and Louise Goldschmidt introduced themselves. Dean Snow opened the floor to nominations. Under the Bylaws, John Vincenti, the current vice president, will automatically become president. Steve Smith has indicated a willingness to be the new vice president, and Lee Stout has offered to be the new treasurer. Art Goldschmidt will continue to be secretary. No other nominations were made. John Vincenti moved that nominations be closed; motion passed unanimously. He then asked for a unanimous vote for the new officers; motion approved by a voice vote. Lee Stout called for a round of applause for the outgoing officers, Dean and Cliff, for their service to our club. Art announced that he will represent our club at the IATC Convention in Columbia, SC, on 27–30 June, and urged the members to think over the summer about people they might invite to attend our fall programs and who might become future members. John distributed a paper containing our new Web address and the dates, talks, and presenters for the 2013–2014 program year. Our Web site will include old minutes, names and contact information for officers and other members, and announcements of future programs.

Tom Berner spoke on his and Paulette's March 2013 trip to Cuba under the aegis of the Penn State Alumni Association, focusing on Cienfuegos, Trinidad, and Havana. Despite the numerous restrictions imposed by the US government on American travel to Cuba, the United States is in fact second only to Canada in the total number of its citizens who go there each year, but he noted English, German, Spanish, and Japanese tourists, as well as several Road Scholar tour groups. Private automobiles are scarce, except for lovingly maintained vintage American cars, but their Chinese-made tour bus was luxurious and bicycles made in China abound. Private businesses are growing, especially restaurants. Because Cuba's ally, President Hugo Chavez of Venezuela, died during their sojourn, music was forbidden on the TV and radio stations and in the hotels for a long mourning period. Tom spoke at some length about the Cuban people, living conditions, the cigar factory they visited, and efforts to preserve architectural monuments from before the 1959 Revolution. He then showed slides of his photographs and his wife's paintings of Cuba, which they have compiled in a book called Eye on Cuba: Pixels and Bristles, which is available for sale via Amazon.com. A lively discussion ensued on comparisons with China, Cuba's changing political and economic prospects, its vivid colors, architecture and architects before and during the Castro era, the University of Havana, Cuban newspapers and bloggers, Cuba's need for an industry other than tourism, the scarcity of electric power (generated by oil imported from Venezuela) in Cuba, and other topics.

The meeting adjourned at 7:55 p.m.

Respectfully submitted, Art Goldschmidt, secretary