



Photo: Bruce Haglund

The publican draws Fullers (and more) at The New Forest's local, an easy walk through the woods from WIT.

RETREAT IN THE NEW FOREST

After considering several venues and polling the membership for potential attendees [30+!—*ed.*], we've settled on hiring the Chubut building at Wessex Institute of Technology <<http://www.wessex.ac.uk/>> in The New Forest, UK. Our choice was based on capacity, transportation, and family options. Accommodations are quite reasonably priced (£49 single, £59 double including breakfast), especially when compared to London.

Capacity. The largest venue found, WIT can accommodate 30 SBSEers in ten single and ten double rooms. The rooms can be booked directly with WIT on a first-come, first-served basis. Mention SBSE when booking. Attendees who are traveling with family and those who aren't able to book at WIT can find lodging in nearby towns. The meeting hall can easily host SBSE presentations, has internet connectivity, and is surrounded by informal outdoor meeting spaces. Furthermore, the lodgings have large common rooms suitable for small group gatherings. More informal meetings, food, and libations can happen at the local pub, an easy walk through the woods from WIT.

Transportation. New Forest/Ashurst is easily reached by train from either London or Oxford, with a connection in Southampton. The two-hour train ride is a pleasure and sets you down opposite the pub. You can walk to WIT in 15 minutes or hire a cab.

Family Options. If you bring your family, you'll find more family-friendly accommodation with more to see and do at inns and hotels in the nearby towns of Ashurst (at the New Forest train station), Lyndhurst (a long walk or taxi ride), Brockenhurst, or Lymington (the next train stations south of Ashurst).

Stay tuned, we'll publish the call for participation in December. Meanwhile, save your wimpy dollars, it takes two to purchase a pound in England. Make sure to book well in advance of the retreat to get the best deals on accommodations. ▮

—Bruce Haglund

SBSE CALENDAR

2007

Nov 22–24 PLEA Conf; Singapore

2008

May 3–8 ASES Conf; San Diego, CA

May 15–17 AIA Conv; Boston, MA

Jun 24–28 ARCC/EAAE Conv; Dublin, IR

Jul 22–23 TIA/SBSE Conf; Oxford, UK

Jul 24–25 SBSE Retreat; The New Forest, UK

Jul 26–27 Comfort Conf; Windsor, UK

Oct 22–24 PLEA 2008; Dublin, Ireland

2009

May ??? ASES Conf; Buffalo, NY ▮

ELECTRONIC ELECTION

This year we'll hold our second-ever electronic election because all SBSE members no longer receive hard copies of the *SBSE News*. We'll e-mail ballots to everyone through the list server and our current memberships rolls. You must be a 2007–08 SBSE member to vote, but you may submit your dues when you submit your ballot. Stay tuned for e-ballots and instructions or send in the ballot enclosed in the *SBSE News* hard copy! ▮

FULL RETREAT INFO SOON: [HTTP://WWW.SBSE.ORG/RETREAT2008/](http://www.sbse.org/retreat2008/)

LETTERS TO THE EDITOR

I want to thank the retreat organizers for encouraging me to participate in SBSE. I've been sharing with our staff the enthusiasm and excitement so many of the group conveyed to me over the course of the retreat. Each week we add a "what's new" cover page to our web site—the SBSE retreat was featured for a week. I tried to capture the essence of the gathering from ALF's perspective.

—Steve Swenson, Aldo Leopold Foundation

[We think of ourselves as an inclusive and diverse organization dedicated to sharing information that will lead to global sustainability. Thanks for participating and promulgating!—ed.]



As updating; the *LA Times* had a second interview (3 hours). *[We're eager to see the article!—ed.]* Mike Montoya (CalPolySLO) is to have the Atascadero house open for viewing this October. He was enthusiastic about my offer to have two small Skytherms built with student help. One a beach rental type in Tijuana; the other a small house or office building on the Cal Poly campus. If the latter, I would put in a whole series of ground level demonstrations of Skytherm roofpond and solar stills. I'll send dues for the two future years since I intend to goad SBSE until I am more than 100. █

—Harold Hay, World Citizen

[I hope Harold's setting the standard for SBSE longevity and involvement!—ed.]

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OPINION FROM THE LISTSERVER

[Gail Brager inspired these responses with her July posting on the USGBC Research Agenda archived at <<http://www.lists.uidaho.edu/pipermail/sbse/2007-July/thread.html>>.—ed.]

ETHICS AND CODE

There is a connection between ethics, and the building code regulation that Nick mentions and the Keynesian "catastrophic change of circumstances" that Sue cites. In an article first published in *Via* magazine (*Via* 10, 1990), Frances Ventre gives a chronology of building regulation in U.S. law. He cites how catastrophic events like the typhoid epidemic of 1880 led to sewerage treatment law; catastrophic building fires from 1900 thru 1960 led to increasingly stringent fire regulations; the 1970 oil embargo led to energy conservation standards; accessibility, first advocated in the early 1950s by WWII veterans, finally was proscribed in various 1980s public laws; and indoor air-quality standards were adopted after legal suits and advocacy by 1990s office worker unions. The article is republished in *Time-Saver Standards for Architectural Design* 7th and 8th editions (which I edited). Extreme climatic events (e.g., the late 1990s Chicago heat wave) and more recently, flood and drought/fire events in all regions, are examples of "changes of circumstance" events that move the general public to demand enforcement of existing laws (based on Clean Air and Clean Water Acts) and adoption of more rigorous standards. Ventre closes his 1990's article with, "The rules for tomorrow's design and construction have yet to be written...these rules most certainly will be written, whether by enlightened and sensitive designers...or by others who do not share that aspiration...How to turn a universalistic, largely negative and coercive authority, the regulatory system, into a positive stimulus for achieving...environments that inform and liberate is no easy task. Nor is it ever completed. Environmental events and species extinction have long been evident in the making, and are now extreme enough to be "tipping points," calling for public participation, advocacy, and leadership by architects and environmental designers who are trained in making healthy environments.

—Don Watson

BUILDINGS AND OCCUPANTS

I apologize for getting into this interesting conversation so late, but as an "unreconstructed modernist and ecologist" I can't resist jumping in to support some of your comments. Surely the list that Gail presented is important, but, as several of you pointed out, it seems incomplete and for those trained in engineering, economics, or technology, but not for those interested in the dynamic relationship between a building and its occupants. Several SBSEers have made important corrective points. Sue starts her list with "opening the windows." What a good idea(!), especially if we include the proper design and use of a new generation of windows *[with appropriate shading!—ed.]*. Paul adds "the occupant and time," another good idea, since without linking our behavior to nature's rhythms, we can never hope to teach an ecological relationship between dwelling and dweller. Our over-reliance on machines has so isolated us from nature that we've lost traditional sensibilities to time and tide. The 11th century Chinese cut the pie finely (72 seasonal units), but their extraordinary sensitivity to seasons informed how they lived for thermal comfort and for ceremony. Perhaps this is too "fuzzy," but surely it's within the realm of modern reality to do as Khan suggested for his design of the Exeter Library, "Get a book and move toward the light." If you carry through, seasonal movement should be a fundamental to design education. Pablo emphasizes the "importance of passive solar" at a point in time when we seem hell-bent on solving all our environmental-control problems with PV add-ons. I think that as educators we have to look more deeply into the ecology of buildings. We must teach how people can play their part, and how to design buildings that make it possible and attractive for them to do so. Traditionally people all over the world have had a more intimate relationship with their dwellings, perhaps difficult to achieve in these mobile times, but not impossible, especially if our academic programs are framed by a sense of Paul's idea of "the occupant and time."

It may take a revolution in design education as I suggest in *Ritual House*, built on the idea that, "As we occupy dwellings, we make certain adjustments for comfort in response to changes in the natural environment. We repeat these adjustments in concert with the unique rhythms of weather and climate in our particular settings. This repetition can give rise to rituals that feed our souls." Indeed, it has been the traditional way people achieve comfort by low-energy means. The challenge for SBSE is to move past technocratic answers, to develop and to teach the modern equivalent of a "ritual house." █

—Ralph Knowles

ANNUAL MEETING NOTES

1. The meeting was called to order at 12:12pm in Room 230B of the Cleveland Convention Center.
2. SBSE President, Chris Theis, reported that there was an SBSE board meeting prior to the annual meeting. The board discussed modifying the SBSE bylaws—the proposal will be distributed for vote through the SBSE web site. Specifically, it is proposed to expand the current board of directors from 3 to 7 positions. Three committees will be formed to better deal with the needs of the SBSE membership. Committee chairs and the Secretary/Treasurer would be added to the board.
3. The President asked for nominations for the current board positions, Secretary/Treasurer and President-Elect. Judy Theodorson and Michael Zaretsky were nominated to serve as the Secretary/Treasurer. Leonard Bachman, Adil Sharig-Eldin, and Amad Afifi were nominated to serve as the President-Elect. [*See the ballot for final slate of candidates.—ed.*]
4. The President gave the treasurer's report. As of the end of 2006, the SBSE had \$35,348.12 in bank accounts. The major income for SBSE is selling the Pilkington sun angle calculators.
5. The membership report was distributed to all in attendance at the meeting.
6. Walter Grondzik gave an update on the Peer Review Network. Volunteers are still needed to assist with promotion and tenure cases.
7. Bruce Haglund gave an update on the *SBSE News*. Martha Bohm volunteered to assist Bruce with the production and editing the newsletter.
8. Bruce Haglund gave an update on the SBSE web site. For any broken links or issues with the site, contact Bruce. He'll be the interim webmaster until someone takes over the role from Robert Marcial.
9. Chris Theis recognized Fuller and Jane Moore, and John Reynolds for their continued support of SBSE scholarships. Several scholarships were given to attend the SBSE retreat, and five students accepted scholarships to attend the ASES conference in Cleveland.
10. The SBSE membership discussed proposals for both student design and case study competitions. The two competitions will be announced at the beginning of Fall 2007.
11. Susan Roaf encouraged the SBSE membership to consider attending the 2008 Conference in Oxford. The discussion will be centered around rethinking architectural education.
12. Jim Wasley updated the SBSE membership on the work of the USGBC formal education committee. An awards program for green building education at the K-12 and the College level will be announced in 2007. In addition, an academic conference in conjunction with Greenbuild is planned for Boston in 2008.
13. Martha Bohm updated the membership on the USGBC green building research agenda, which has approximately \$1M in funding available. For more agenda info, contact Martha.
14. Walter Grondzik has been tasked to work with NAAB to update the accreditation criteria with regard to sustainability. If you're interested in participating, contact Walter.
15. GBI/Green Globes is available for faculty to use in studios. For more information about the system, contact Harvey Bryan.
16. Mary Guzowski discussed a proposal for a 2010 Imperative Curriculum project. For more information, or to participate in the project, contact Mary. The goal of the project is to create a model for carbon-neutral studios, a key component of the 2010 Imperative.
17. ASES will be held in San Diego in May 2008, and Buffalo in May 2009. The 2008 deadline for peer-reviewed papers, forum proposals, workshops, and abstracts for non peer-reviewed papers is October 8.
18. The meeting was adjourned at 1:44pm. █

IT'S ABOUT DUES

This is the late summer call for 2007–2008 membership renewal (\$25 full member/\$15 student/\$0 developing country). If you haven't renewed, please put it on your to do list. If you attended the retreat, you're up-to-date. If you are from a developing country and wish to stay current, just send an e-mail to <jtheodorson@wsu.edu>.

Those who still need to renew have two options. 1.) Send a check made out to SBSE. If you have changes to your personal information, just attach a note or membership form and send to Judy Theodorson; SBSE Membership; Interdisciplinary Design Institute; Washington State University Spokane; POB 1495; Spokane, WA 99210-1495. I'll send you a response by e-mail. 2.) Paypal: go to <<http://www.sbse.org/membership/paywithpp.htm>> and follow directions. If you have profile changes, you may enter them online or send me an e-mail. I thank you all.

—Judy Theodorson

It's again time to renew your membership in SBSE. If you should have any hesitation, let me outline just a few of the many exciting things currently going on or in the works. Of course our Listserver is a fantastic resource and, just like NPR, many folks out there take advantage of it but aren't current in their membership. Another fantastic Retreat took place in June at IslandWood on Bainbridge Island. We're cosponsoring a major conference next year in Oxford, England, followed by a Retreat in the UK. We're in the planning stages of initiating an international student design competition (with very generous awards thanks to the Jeffrey Cook Foundation). Another exciting project in the works is the SBSE 2010 Education Resources Initiative, which is intended to assist schools of architecture meet the goals of Ed Mazria's 2010 Imperative.

Also, remember that a portion of your dues helps us award several student scholarships to assist in attendance at the Retreat and for travel to present papers at the annual ASES Conference (Jane and Fuller Moore, and John Reynolds help support this with generous contributions as well). So, as we start another school year, remember how much you benefit from membership in SBSE and help us to continue to be a vibrant organization. █

—Chris Theis

—Nick Rajkovich

ISLANDWOOD RETREAT: A STUDENT'S REFLECTION



photo: Bruce Haglund

Harvey Bryan was named the 2007 Passive Solar Pioneer. You can view his acceptance presentation, which includes a 1975 portrait, on the ASES Solar 2007 web site.

📖 This year's chair of AIA COTE, **Kira Gould**, has also co-authored *Women in Green* with Lance Hosey.

📖 John Carmody, **Mary Guzowski**, Richard Strong (Minnesota) received a grant from the state pollution control agency to develop the Minnesota Zero Energy Design (mnZED) Protocol—design strategies, guidelines, and a calculator to support carbon-neutral design.

✈️ **Katy Janda** has left Oberlin for a one-year research appointment with the Lower Carbon Futures program of the Environmental Change Institute at Oxford University, UK and is residing in Sue Roaf's Eco-House.

📖 **Norbert Lechner's** book, *HCL*, has just been published in Indonesian where he was invited for the public release and to give lectures in both Jakarta and Jogjakarta on the "Future of Architecture." And he's following up with lectures in Chongqing, China in September and in Korea in October.

🏠 **Kaled Mansey** has been promoted to Associate Professor with tenure at Oklahoma State.

🏠 **Philip Mead** has been named interim Chair of Architecture & Interior Design at Idaho.

🦋 **Rob Peña** has accepted a teaching position at Washington.

🏠 **Sue Roaf** has just taken the position as Professor of Architectural Engineering at Heriot Watt University in Edinburgh. ||

For a student, the SBSE retreat offered a peek into a greenhouse germinating architectural ideas. This behind-the-scenes look differed, refreshingly, from interacting with faculty through lectures, studio, or published work. As fellow faculty, researchers, and practitioners, I'm sure that the majority of SBSEers generally communicate with each other on an on-going basis as they develop course curricula, studios, academic papers, and lab work.

Yet, by the time the ideas get to us, fair students, the ideas and projects have been cultivated, the poorer bits pruned away, then packaged and presented as our texts, case studies, and precedent images. At the IslandWood retreat, I was inspired by the exposure to esteemed faculty with their hands dirty, metaphorically of course, in the hard work of developing a stronger field of sustainable design.

Indeed, for me the retreat unearthed several moments of "Ah, yes! I remember why I started this program in the first place." There were the provocative, open-ended questions after the last PowerPoint slide would fade to black, and the energy fired into brainstorming sessions, and the conversations with people I'd only seen named on the covers of books, all of which revealed the vivaciousness present in the movement of educators dedicated to (and accountable for) training the coming generation of responsible building design professionals.

There were also positive indications of what's to come in that harvest. Hearing from some of the recently graduated students involved in the young professionals projects of the USGBC, or developing and publishing new research, or getting into teaching, encouraged me to realize that as graduate students we can already begin to contribute. My notebook recorded a running list of projects I could see myself spearheading, and perhaps presenting to this very group. The pile of *omiyage* (teaching and research gifts) that we exchanged with each other assures me I will not run short on inspiration.

—E.B. Meier

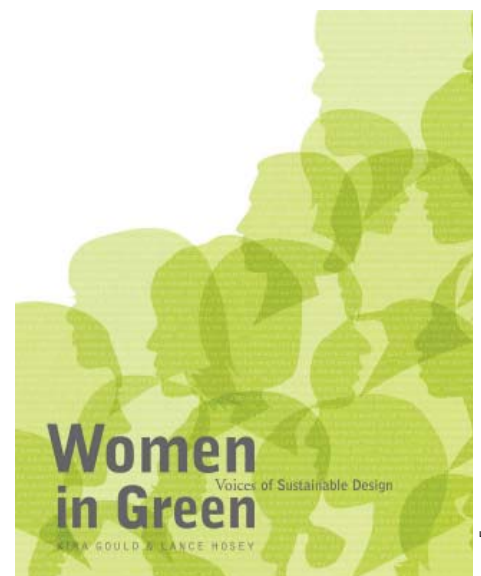
WOMEN IN GREEN

The last line of *Women In Green: Voices of Sustainable Design* by Kira Gould and Lance Hosey acts as a fine summary of the book, which has a conversation starter on every page. Each chapter, structured around a question, abounds with candid discussions and a veritable who's who of characters. There is undeniable inspiration in the voices captured here, who, for example, declare that "the goal of the designer is to capture the ecological romance of a place." Yet, can that voice be identified as male or female? With all the uncertainties, controversies, and resolutions offered about design and life and love, I wonder if readers will get around to discussing the central question that the authors pose in the preface, "Why Women?"



SBSEers "pose" for a group photo op at IslandWood.

photo: Bruce Haglund



cover: Ecotone

NEW BOOKS BY SBSEERS

DAVID BAINBRIDGE

Voice is given equably to interior architects, interior designers, landscape architects, researchers, educators, practicing architects, and developers. This diversity is fitting for a book whose two heroines aren't architects at all. The introductory chapters on Rachel Carson and Jane Jacobs are great primers for those new to the discussion of ecologically-informed design and offer a key to the "gender question" as well. Jacobs challenged her readers to dismiss the linear; advice that could be extended to the connection of a specific gender to a particular design movement.

On the other hand, the list of statistics about women as designers, voters, and consumers is particularly convincing and resonates with Sandra Steingraber's affirmation, "Biologically, women are in a different position than men. Their bodies are the first environment for the next generation." I would argue that certain subsets of the sustainable design movement do relate particularly to the experience of women in North America, such as suburbia, salary gaps, and control of consumer dollars. Zoom out a little, however, and gender-specificity becomes blurred, and the sustainable design conversation becomes about, in the words of contributor Kathleen Bakewell, "how we attack the greater, more entrenched problems of sprawl, inequity, and consumption." Topics that involve all of us.

The tendency of *Women In Green* to talk more about the "greater problems" rather than about gender makes it particularly suited to use in the classroom. The stand-alone quality of each chapter makes an easy resource for any teacher to dip into and cull discussion questions, reading lists, and poignant open-ended questions equally suited for those uninitiated or those much-versed in the sustainable design saga.

In the authors' effort to note each contributor's profession along with her name and to quote extensively to capture the voice of each woman, the chapters often read like extended newspaper articles. The writing is less than inspired; however, it is chock-full of people to inspire us. The contributors are sadly not fully indexed, so while you can look up Baumeister in the directory, it's hard to find that great list of design priorities she rattled off on page 163. The mixed-gender nature of the name directory also prompts the question, "Why Men?"

Focus on the subtitle, "Voices of Sustainable Design," and it's clear why it's critical to read this book. It's a cacophony out there and, in a way, the lack of consensus in the industry on "what is sustainability" is the lifeblood of movement. We're engaged in a complex discussion of how we build an environment for how we live. In that, we all should have a say.

—Emily Elizabeth Bridget Meier

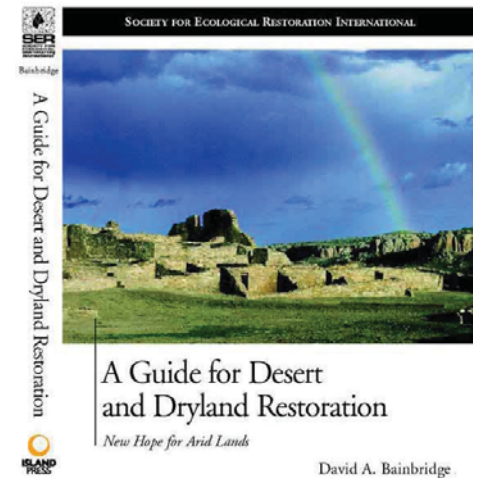
EATING OUT IN HONG KONG

In April 2007 SBSEer, architect, and restaurateur, Frank Sun opened a second restaurant, Bricolage62. It is a brasserie-style, full-menu café during the day with a dinner and bar scene at night. It's located on the ground floor of a pre-war building at 62 Hollywood Road. The interior features wood and stainless steel counter tops against the building's exposed original walls and ceiling. Classic films project onto the wall above happy diners—we enjoyed *Babette's Feast* on the day that I visited. ||

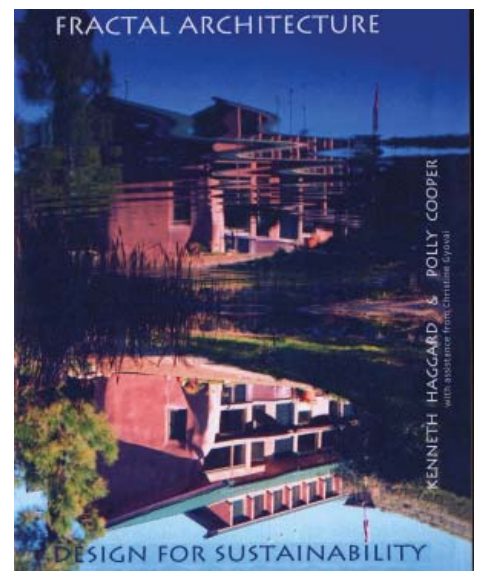
—Alison Kwok



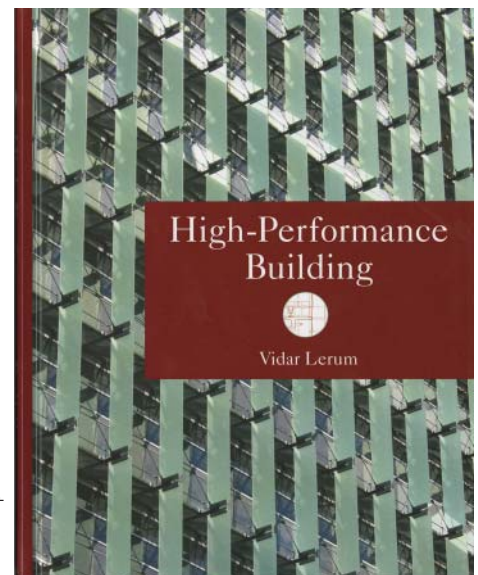
Babette feasts above feasting diners at Bricolage62.



POLLY COOPER & KEN HAGGARD



VIDAR LERUM



STUFF FOR YOU

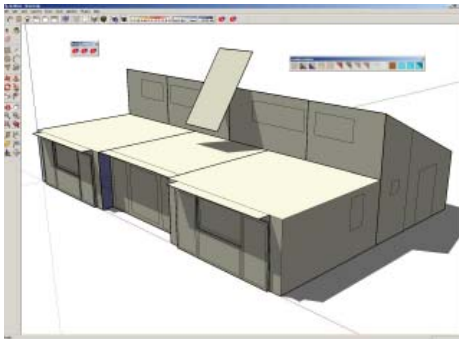
BUILDING ENERGY TOOLS

The web-based Building Energy Tools Directory at <http://www.energytoolsdirectory.gov> contains information on 344 building-related software tools from over 20 countries. Since April more tools have been added, including Daylight 1-2-3, Demand Response Quick Assessment Tool, and METEONORM 6.

For each tool the directory provides a short description along with information about technical expertise required, users, audience, input, output, validation, computer platforms, programming language, strengths, weaknesses, technical contact, availability, and cost. A link is provided for directly translating the web pages into more than 8 languages.

If you know of a tool (yours?) that isn't included, e-mail the information shown at <http://www.energytoolsdirectory.gov/submit.cfm> to Drury.Crawley@ee.doe.gov.

ENERGYPLUS VERSION 2.1 AND DESIGN PLUGIN FOR SKETCHUP



screen shot: Dru Crawley

Screenshot of the Design Plugin user interface showing an importing EnergyPlus input file.

The next release of the *EnergyPlus*, Version 2.1, becomes available in mid-October. Key new features include packaged terminal air conditioner, multi-speed heat pump, and additional mixed-mode ventilation controls. We've updated and extended capabilities throughout the existing building envelope, daylighting, and HVAC portions of the program.

Design Plugin integrates the *EnergyPlus* simulation capabilities within Google's *SketchUp* drawing software. Users will be able to draw their building, paint the surfaces with thermophysical properties, select HVAC systems, and simulate the energy performance of their building all within *SketchUp*.

EnergyPlus V 2.1 and *Design Plugin V 1.0* are available at no cost from <http://www.energyplus.gov>. ■

—Dru Crawley

PARTNERS IN EDUCATION

ENERGY CONSUMPTION GETTING TO AND FROM BUILDINGS EXCEEDS ENERGY USE FOR OPERATIONS

[Staying ahead of the curve is our job at BuildingGreen, and we always want to keep you abreast of our latest explorations. Even our editors were surprised by what they found as they explored the impact transportation has on the building industry's effort to "go green." —Jerelyn Wilson]

An examination of the "transportation energy intensity" of buildings has found that getting people to and from buildings uses more energy than the buildings themselves consume. The lead article in the September 2007 issue of *Environmental Building News (EBN)* shows that for an average office building in the United States, 30 percent more energy is expended by office workers commuting to and from the building than is consumed by the building itself for heating, cooling, lighting, and other energy uses. For an office building built to modern energy codes (ASHRAE 90.1-2004), more than twice as much energy is used by commuters than by the building.

"This was a huge surprise," says *EBN* executive editor Alex Wilson, author of the article. "I knew that transportation energy requirements were significant, but I was amazed at the differences." Wilson collected average U.S. data for commute distance, vehicle fuel economy, the split among different commuting options, and the number of square feet of building per office worker to normalize transportation energy intensity in Btu/ft²-yr. He was then able to compare that transportation energy intensity to the average building energy use (also in Btu/ft²-yr) for average existing office buildings and energy code-compliant buildings—see the table at http://www.buildinggreen.com/press/transportation_energy_intensity.cfm.

"The green building community has expended tremendous effort to reduce the operating energy use of buildings," notes Wilson, "but very little effort to reduce the transportation energy use of those buildings." He would like to see this change. "To achieve widely shared goals for dealing with climate change," says Wilson, "we simply can't ignore the energy consumption getting to and from our buildings."

The article, "Driving to Green Buildings: The Transportation Energy Intensity of Buildings," reviews a wide range of strategies for reducing vehicle use. Such strategies are often lumped under the heading "transit-oriented development" and include increasing development density, creating mixed-use development, providing various forms of public transit, restricting parking, and creating more pedestrian-friendly streetscapes. "Although progressive urban planners have been advocating for such development features for years," says Wilson, "the building industry has only recently begun paying attention to these issues."

—Jerelyn Wilson

LRC OFFERS A NEW SCHOLARSHIP

W.A.C. Lighting has bestowed a scholarship to offset the cost of tuition for a graduate student at Rensselaer Polytechnic Institute's Lighting Research Center (LRC). "Scholarship sponsors are forward-looking companies demonstrating a strong commitment to leadership development within the lighting industry," said SBSEer Russ Leslie, Chair of LRC's Graduate Programs in Lighting. "Education is a key component of that development, and we are grateful to W.A.C. Lighting for their generous support of our educational programs."

The first recipient of the scholarship is Yi-wei Liu, a second-year student in the MS in Lighting Program. "Yi-wei is an excellent student in this arduous program," said Dan Frering, the LRC's manager of education. "His research in advanced lighting technologies will assist not only W.A.C. Lighting but the entire lighting industry in advancing energy-efficient lighting."

The two-year, 48-credit MS in Lighting Program immerses students in lighting research and application and culminates with an original thesis project under the guidance of a faculty member. The LRC offers flexible Master's and PhD programs that can be designed for professionals interested in advancing their careers or for traditional students planning to enter the lighting field. More information about educational opportunities at the LRC is at <http://www.lrc.rpi.edu/education/graduateEducation/index.asp>. ■

—Keith Toomey

FINDING TRUE NORTH

A method for determining True North by factoring in your locale's current magnetic variation when taking compass readings at a building site (as calculated on the web site <<http://www.ngdc.noaa.gov/seg/geomag/jsp/Declination.jsp>>) was presented in the Spring 2006 *SBSE News*. However, inaccuracies in compass readings can be produced by local influences. (See <http://en.wikipedia.org/wiki/Magnetic_declination> and <http://en.wikipedia.org/wiki/Magnetic_deviation> for a brief discussion of these issues.)

If precise and reliably accurate results are required, the familiar "Equal Altitudes" method can be used to determine true north on a building site (one source is *Sundials: Their Theory and Construction* by Albert E. Waugh). This method requires precision during setup, a horizontal piece of ground, and a significant amount of time to observe morning and afternoon shadow patterns in order to plot a true East-West line and then construct a true North-South line.

A faster and equally precise method involves directly constructing a true North-South line by marking the shadow of a plumb-line at the exact instant of solar noon (local apparent noon) at your building site. This is accomplished by first determining the longitude of your building site. Hand-held GPS units make this a simple process and produce accurate results.

Knowing longitude, the precise clock time (standard time, local mean time) at which solar noon will occur at your building site can be obtained by going to <<http://www.solar-noon.com>> and printing a Solar Noon Calendar (select the radio button for "Solar Noon," not "Standard Time Correction"). Remember to compensate for Daylight Saving Time if it is in effect. Using the Equation of Time, you could calculate local apparent noon for a building site on a particular day if so inclined.

Synchronize your watch to the second using the National Institute of Standards Clock at <<http://www.time.gov>>. Alternately, instructions for synchronizing a laptop computer clock with the National Institute of Standards Atomic Clock can be found at <<http://tf.nist.gov/service/its.htm>>.

Set up a plumb line at your building site and mark the plumb-line's shadow at the precise instant of solar noon (don't forget to correct for Daylight Saving Time). This method is quite precise and can be used to align sundials. ■

—Truett James



The author's alter ego, sundial consultant Truett North, finds true North deep in the heart of Texas.

DESIGN/TECHNOLOGY FACULTY POSITIONS

IDAHO

The Department of Architecture and Interior Design seeks 2 full-time, tenure-track entry level faculty beginning Fall 2008 to teach upper division design studios and integrate their research and lecture courses into the studio. We are particularly interested in those who can teach and research in one or more of the following areas: sustainable environmental control systems; "poetic engineered" structures; architectural theory; research methods; bioregional planning; or environment and behavior.

Qualified candidates must have a Master's in architecture plus professional practice, research, or teaching experience. Preference will be given to candidates with professional registration, a post-professional degree, cross-disciplinary dual degrees, or substantial experience in Architecture plus Landscape Architecture, Interior Design, Art, or Engineering.

To apply send a curriculum vitae, a statement of teaching objectives as well as pedagogical philosophy, contact info for three references and your relationship to each, and a portfolio of work including examples of either student work and/or professional work. Send materials to Bruce Haglund, Search Chair; Dept. of Architecture and Interior Design; University of Idaho; P.O. Box 442451; Moscow, ID; 83844-2451; <bhaglund@uidaho.edu>; 208.885.5740. An AA/EOE.

USC

The School of Architecture seeks several new tenure/tenure-track faculty over the next two to three years. Positions for Fall 2008 are available in two areas—design and building technology. The School emphasizes the integration of design and technology, so the positions may overlap in area of interest and responsibility. Tenure/tenure-track appointments will be made depending upon the qualifications of the selected candidates. Review of applications will begin immediately, and continue until the positions are filled.

Applicants must send a letter describing practice, research, and teaching interests; curriculum vitae; samples of selected work; and contact information for three references to Chairs, Design and Technology Faculty Search Committee; School of Architecture; University of Southern California; Los Angeles, CA 90089-0291. For more info contact Marc Schiler <marcs@usc.edu>. An AA/EOE. ■

PROPOSE OUR 2009 RETREAT LOCATION

In 2009 the ASES Solar Conference will be held in Buffalo, NY, in May. Since May isn't an opportune time to hold a retreat, the choice of a venue is wide open. If you have discovered the perfect spot for 50 SBSEers at our annual retreat and are willing to serve as the logistics coordinator, put together a proposal for presentation at the May annual meeting in San Diego. We look forward to a legendary retreat at your favorite place. ■

—Bruce Haglund



Over twenty years ago 20 SBSEers gathered at Heceta Head's haunted keeper's house for the first retreat.

Photo: Heceta Head B&B web site

BACK-TO-BACK IN THE UK

OXFORD CONFERENCE JULY 21-23



Ed. agog at Oxford's Natural History Museum.

SBSE RETREAT JULY 24-25



Photos: Tisha Egashira

The Chubut Building at WIT in The New Forest will be the meeting place for retreating SBSEers.



SBSE NEWS
 C/O BRUCE HAGLUND
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SBSE 2010 FALLOUT

EDR EDUCATOR/CURRICULUM SUMMIT

The SBSE response to the 2010 Imperative got significant billing at the Energy Design Resources-Educators Summit, documented at <http://www.archenergy.com/edr/edr-educators/>. On June 14 people from various universities, utilities, and private consulting met at the Kellogg West Conference Center to discuss methods for supporting California educators' efforts to discuss and advance energy-efficiency and sustainability efforts to students. The web site archives have meeting minutes, opportunities, challenges, and resources summaries in pdf format. It also includes presentations from the meeting by SBSEers Pablo LaRoche (Cal Poly Pomona), Margot McDonald (Cal Poly, SLO), Marc Schiler (USC), and Hofu Wu (Cal Poly Pomona). Also is available are meeting materials such as EDR summit background summary, EDR summit agenda, overview presentation, list of attendees; and the SBSE Teaching Resource Project-2010 Imperative.

—Marc Schiler

AIA 2008 NATIONAL CONVENTION AND DESIGN EXPOSITION

Terri Meyer Boake (Waterloo), Mary Guzowski (Minnesota), and Michael Utzinger (Wisconsin/Milwaukee) will present a 90-minute seminar, *The Leap to Zero Carbon: Incorporating Advanced Zero Energy Strategies into High Performance Design*, at the AIA 2008 National Convention and Design Exposition in Boston (May 15-17). Terri, Mary, and Chris Theis (LSU) will present another 90-minute seminar, *Preparing for the 2030 Challenge: Maximizing Sustainable and High Performance Design through Zero Carbon and Zero Emissions*.

Additionally, a proposal for a preconvention workshop (May 14), a carbon-neutral design charette, led a team of academics and practitioners selected by Alison Kwok (Oregon) and Catherine Roussel (AIA) is pending. ■

—Terri Meyer Boake

WINTER ISSUE SUBMITTAL DEADLINE—DECEMBER 1

FIRST CLASS MAIL