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## Summer 2005 Sustainability Workshops

### OVERVIEW

*"The program was great – I've gone from a hazy idea of sustainability to a real grasp of the subject." Summer 2004 Alumni*

Both of the Ecosa Institute summer 2005 workshops in sustainability offer participants an in-depth, intensive experience not offered in shorter programs. Ecosa workshops limit enrollment to fifteen participants which provides for optimal learning experiences with some of the worlds leading experts in sustainable systems. Our workshops are "Hands-On" blending theory with practice. You will learn the how-tos of sustainability and be exposed to some of the most innovative thinking in the field.

Our lecturer's, guest faculty and instructors are regarded as experts and while they are adept educators they are also working professionals giving workshop participants an added real world perspective of how to bring sustainable thinking to a professional career. Our workshops are for students, builders, homeowners, architects, planners, and those with a sincere interest in applying practical solutions to real world problems as applied to human design and the natural world.

### WORKSHOPS

*"The program has honestly changed the way I look at building and the environment." Summer 2004 Alumni*

#### HANDS-ON EXPLORATION OF SUSTAINABLE MATERIALS & METHODS

May 16 - June 10, 2005. Guest Speaker Pliny Fisk

In this workshop we will build a small structure for a local school. We will use sustainable building materials which could include straw bale, rammed earth, adobe, pressed earth bricks, cobb, poured earth and more. Days will be spent on the job site working with the materials and professionals as you learn the proper methods and applications. We will travel to other buildings in the area exemplifying use of these materials with guides. We will explore some of the newer building materials available and discuss what makes a building, material or system truly sustainable. Lectures, discussions, and readings supplement the course.

#### PERMACULTURE AND WATER IN ARID REGIONS

July 11 - Aug. 5, 2005. Guest Speaker John Todd

Anyone successfully completing this course will be granted a Permaculture Designer Certificate which allows the holder the ability to earn wages and market oneself as a Certified Permaculture Designer. This course follows a world standard 72-hour certification curriculum. Additionally this course will go beyond permaculture and look at water issues in arid regions to explore how to solve what may very well become one of the most critical issues of the this century. We will build a grey water treatment system. Topics covered in this course include: Sustainable Community Design; Principles of Natural Systems; Ecosystem Restoration; Water Catchment – Rainwater/Run-Off Storage, Treatment, & Use; Waste Water Treatment & Living Machines; Composting Toilets; Graywater & Irrigation; Systems; Aquaculture Systems; Agriculture & Community Gardens; Community Sponsored Agriculture; Native Seeds; Landscape Architecture & Permaculture; Edible Landscaping & Medicinal Herbs; Xeriscaping; Materials – Alternative Ground Surfaces for Parking; Native Plants; Appropriate Technologies.

**ADVISORY BOARD:** Dr. J. DOUGLAS BALCOMB National Renewable Energy Lab WILLIAM P. BRUDER Architect  
PLINY FISK Center for Maximum Potential Building Systems EDDIE JONES Architect ALEXIS KAROLIDES Rocky Mountain Institute  
Dr. DAVID ORR Oberlin College ANTOINE PREDOCK Architect Dr. JOHN TODD Ocean Arks International  
SIM VAN DER RYN Architect JAMES WINES Architect

## TYPICAL DAY

*"It was a lot of fun and a great learning experience, I really liked the hands-on aspect and the field trips were great. It was a lot of hard work but I think that really helps designers to have a better appreciation for builders." Summer 2004 Alumni*

There really is no typical day at an Ecosa Workshop however you can expect the days to be exciting, fun, and highly practical in their content. In each workshop you will discuss the issues important to you with your peers and our faculty, constantly gaining new perspectives and information. Lectures, fieldtrips to exemplary sites with experienced and knowledgeable guides, hands-on building of structures and systems with pro's, readings, exploration, and experimentation all characterize your experience.

Your weekends are free to enjoy the town of Prescott. The surrounding National Forest offers some the best hiking, climbing, and mountain biking in the state. Nearby lakes and reservoirs are excellent for birding, boating, and relaxing. Explore even further to the Grand Canyon and the amazing deserts of Arizona which contain some of the world's most beautiful landscapes.

## GUEST SPEAKERS:

*"I learned from every visiting professor. It was good to bring in professionals to teach their craft." Summer 2004 Alumni*

PLINY FISK is Co-Director of the Center for Maximum Potential Building Systems, a non-profit organization which has been in the forefront of sustainable design and development activities since its inception in 1975. The Center links design and science to create ecologically, economically and socially viable solutions to a range of issues facing the built environment, and works with a spectrum of clients, from individual homeowners and small-scale developments to Fortune 500 corporations, and with municipal, state, and federal governments. Mr. Fisk is a frequent lecturer throughout the U.S. to professional associations, universities, and community-based organizations. The Center's life cycle planning and design methodology is becoming a recognized procedure for establishing the sustainability basis for green building, and is the focus of a two-year research project funded by the U.S. Environmental Protection Agency. Mr. Fisk has served on the President's Task Force on Sustainable Communities, the AIA's Committee on the Environmental Resource Guide and is on the Advisory Board for Environmental Building News. The Center's work has been recognized by several national and international awards, including the 1992 Earth Summit Award for the City of Austin Green Builder Program, the Mexican Government's Environmental Agency (SEDUE) award for affordable housing and sustainable community design, and the 1991 DARE award presented by the National Center for Appropriate Technology. Mr. Fisk holds a B.S., M.ARCH., and M.L.ARCH. (under Ian McHarg) from the University of Pennsylvania.

DR. JOHN TODD was trained in agriculture, parasitology, and tropical medicine, and received his doctorate in fisheries and oceanography. He was an Assistant Scientist at the Woods Hole Oceanographic Institution until 1973, and in 1969 co-founded the New Alchemy Institute to create a science and practice based upon ecological precepts. In 1984 he began developing technologies for treating wastes and purifying water now known as the Living Machine. He is currently President of Ocean Arks International, and Research Director of Living Technologies.

## INSTRUCTORS:

ANTONY BROWN: Founder of the Ecosa Institute, Brown is a registered architect with over 30 years experience in environmental issues. He has spent most of his professional life searching for a fit between his love of architecture and concerns about the destruction of the environment. Moving to the United States from England in 1968 he worked as an architect in Boston and San Francisco. In 1971 he apprenticed with Paolo Soleri and worked on the Arcosanti project for 13 years where he became the project coordinator. At Arcosanti in addition to architectural and construction responsibilities he taught workshop participants the principles of sustainability, arcology and Soleri's philosophy. After leaving Arcosanti and moving to Prescott, Arizona he took a hiatus from architecture to explore other options, working as a writer and editor for a magazine and founding Triad Design an award winning graphic design studio. In 1992 Brown initiated and taught the Ecological Design program at Prescott College and worked on a number of planning and architectural projects for the campus. In 1997 a series of opportunities to work on historic buildings and a sustainable project at the Grand Canyon National Park have brought him the opportunity to create sustainable buildings and demonstrate how this process can have a positive impact. In 1996 Brown formally founded the Ecosa Institute. The goal he defined for Ecosa was to bring innovative thinking, new pedagogical models and a complexity to design education that used nature as its underlying model. Since then he has

attracted a number of leading architects, designers, scientists and writers to the Ecosa Institute to meet with students, discuss their philosophies and review student's work. He has also developed support among the architectural and sustainable design communities for his work and innovative approach to education. Students now come to the Ecosa Institute from across the world to augment their architectural education.

TOM HAHN is an NCARB certified, Arizona and Nevada registered Architect, and Arizona Licensed Residential and Small Commercial Building Contractor. Tom holds a Masters of Architecture in Energy Conscious Design from Arizona State University, and a Bachelor of Arts (majoring in Architecture) from the University of Washington. His career and current practice has centered on energy efficient and environmentally responsible design. He has 15 years of experience in all facets of architectural design, environmental design consulting and project management, from large commercial projects, to residential design and recreation projects. His construction experience spans the full spectrum of alternative and natural building systems, and ranges from small commercial through complex residential and recreation projects, both fully-contracted and volunteer and owner-builder based.

BRAD LANCASTER has been teaching permaculture, and running his own permaculture design, consultation, and education business since 1993. He and his brother have created, and live on, a thriving 1/8th of an acre urban permaculture site in downtown, Tucson Arizona. Within his neighborhood and beyond, Brad feeds his passion for community building and activism, resulting in the creation of an organic community garden, mini-nature park, salvaged bicycle cooperative, neighborhood newsletter, annual tree plantings, local food pot lucks, and more. To help spread additional passions and knowledge on rainwater harvesting and multi-use native plant systems he is writing a book, "Rainwater Harvesting for Drylands".

ANDREW MILLISON is a designer and builder of sustainable landscapes. He has a Bachelors Degree in Ecological Design and Master's Degree in Horticultural Conservation from Prescott College. He is currently director of the Arizona Heirloom Fruit and Nut Regis-tree, teaches Permaculture at Prescott College, and is a landscape contractor and gardener. His enthusiasm for permaculture design drives his work and feeds his lifelong desire for learning.

#### LODGING:

##### Chapel Lofts:

Ecosa Institute has contracted with Chapel Lofts to provide housing for the 2005 Ecosa summer workshops. "The Lofts" will be available from May 11– July 16, 2005 for the Materials and Methods Workshop and July 10 – August 6, 2005 for the Permaculture Workshop. The total cost is \$325 per student which includes use of all facilities and all utilities. Lodging at Chapel Lofts is limited to the first 15 people to reserve their space in the workshop with a registration deposit (see registration form). A \$50 refundable security deposit is required. You will be required to sign a lease agreement provided with your registration packet.

Chapel Lofts is a smoke-free building, located in a residential neighborhood 1.2 miles (20 minutes walking distance) to Ecosa Institute and downtown Prescott. It accommodates a total of 16 people in 8 rooms. Each room has two carpeted individual sleeping lofts with twin mattresses; a built-in vanity/sink unit and mirrored medicine cabinet; two six-foot closet areas with mirrored sliding doors; one shared shower and water-saving toilet accessible from rooms for every 4 tenants; shared community kitchen equipped with gas cooking appliances, refrigerator, and multiple food storage cabinets; laundry facilities include free washers and dryers; automobile parking; utilities (except telephone) are included in housing fee. For five dollars a month students have access to a wireless DSL Internet connection.

If you need special cooking implements beyond the basics you will need to provide them yourself. While staying at the Lofts you are responsible for purchasing and cooking your own food as well as cleaning the kitchen. Please be mindful of the needs of others while sharing this communal space. Plan accordingly. You are responsible for supplying your own bed & bath linen, pillows, towels and other personal items. All rooms are identical. There are two small community rooms, one with a television and VCR. A resident assistant manages the Lofts. See registration form for costs (download from Ecosa website). Contact Ecosa Institute with any questions.

#### Hotels:

Ecosa recommends the St. Michael Hotel. (928) 776-1999. Call Ecosa for special discounts. There are several hotels, motels inns and B&B's in Prescott. Visit: <http://hotel-lodging.info/citys/prescott/az/usa/>

#### PRESCOTT, AZ:

Prescott, AZ which is where we will be spending most of our time, is located in the central mountains of Arizona at an elevation of 5,100 feet and therefore the temperature changes throughout the day and drops sharply at night. June is one of our driest months while in July and August it is common for there to be afternoon monsoon thundershowers. Given the high temperatures, the dryness of the climate and our elevation it is extremely important to stay hydrated during the day while working outdoors in the sun. All basic services and shopping is in walking distance from the Chapel Lofts in downtown Prescott.

#### TRANSPORTATION:

Ecosa will provide transportation for all scheduled fieldtrips. A field trip schedule will be provided with syllabus upon arrival. Workshop participants are responsible for their own transportation to and from job sites which are in biking distance from the Chapel Lofts. There is no bus or train in Prescott.

#### FOOD:

Workshop participants will be expected to provide their own food throughout the workshops and bring their own food on fieldtrips unless otherwise planned.

#### COMPUTER, INTERNET, & EMAIL SERVICE:

There will be at least four computers with Internet access available for use at the Ecosa studio/classroom space as well as a wireless DSL connection if you choose to bring your own computer.

**COLLEGE CREDIT:** Northern Arizona University (NAU) is offering college level credit for the Ecosa Institute summer workshop. To register for college credit with NAU contact:

Tom Rogers  
Chair, Construction Management  
Northern Arizona University  
(928) 523-4679  
[Tom.Rogers@nau.edu](mailto:Tom.Rogers@nau.edu)

#### SUPPLIES:

We have compiled the following lists of clothing, equipment and supplies to help make your course more enjoyable.

#### RECOMMENDED:

- |  |  |
|--|--|
| <input type="checkbox"/> Rain gear   | <input type="checkbox"/> Insect repellent  |
| <input type="checkbox"/> Comfortable walking shoes or sneakers                                     | <input type="checkbox"/> Sunglasses        |
| <input type="checkbox"/> Hot weather clothing (shorts and t-shirts)                                | <input type="checkbox"/> Alarm clock       |
| <input type="checkbox"/> A jacket, warm coat, or sweater (the temperature drops sharply at sunset) | <input type="checkbox"/> Swim suit         |
| <input type="checkbox"/> Nice outfit for nights out  | <input type="checkbox"/> Sun block (SPF30) |
|  | <input type="checkbox"/> Toiletries        |

### OPTIONAL:

- Bicycle
- Personal Computer/Laptop
- Camera
- Journal

### MANDATORY:

- Work gloves
- Sturdy work shoes
- Eye protection (goggles)
- Water bottle(s) (2 qt. minimum)
- Brimmed hat

Ecosa will provide a limited number of hand tools. It is recommended that if you have your own set of hand tools and a tool belt or bucket that you bring them with clearly marked identification.

### WEATHER

Summers in Prescott, AZ are hot and dry with highs reaching into the upper 80 to low 90's and sometimes even hotter. Evenings are very comfortable. Prescott is at an elevation of 5,100 ft. **We cannot emphasize enough the need for people from any climate zone in the country to stay properly hydrated while working outdoors in Arizona.** This means drinking a minimum of two quarts of water while working and more in the mornings and evenings averaging one gallon every 24 hours. Wearing the proper clothing and sun protection is strongly recommended as well: Light-weight long sleeve shirts that are light in color, wide rimmed hats and sunscreen.

Typically starting in July and continuing through August, Arizona gets summer Monsoons. These are isolated rain storms with thunder and lightning and occasional strong winds typically in the afternoons. These storms are typically short in duration. As our summer courses are Hands-On, our intention is for course work to continue in most cases during monsoon storms except in extreme or unsafe conditions. For this reason bringing proper rain gear is recommended.

All workshop participants are required to sign a risk waiver and release form to participate.