

Thursday, March 6 – Saturday, March 8, 2014

CALIFORNIA STATE UNIVERSITY, CHICO

This Way To

# Sustainability<sup>SM</sup> Conference

# IX

PROGRAM

Growing Toward a Sustainable Future



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SUSTAINABLE FOOD  
& AGRICULTURE

SUSTAINABILITY IN  
EDUCATION

SUSTAINABLE  
LIFESTYLE GOALS

ENERGY, WATER &  
CLIMATE ISSUES

BUSINESS & ECONOMIC  
STRATEGIES

EMERGING  
IDEAS

# WELCOME to This Way to Sustainability<sup>SM</sup> Conference IX at California State University, Chico!



**James C. Pushnik**  
*Director of the Institute for  
Sustainable Development*

The Institute for Sustainable Development and the Associated Students of CSU, Chico would like to welcome you to This Way to Sustainability Conference IX. This conference has been organized by our students to address concerns about and potential solutions to the urgent environmental and socioeconomic issues of our time and their interrelationships. Over the next three days, we encourage you to share in conversations, build new friendships, and leave with a refreshed sense of hope and direction for our sustainable future. We specifically have assembled conference tracks that cover a broad range of topics relevant to everyone. We would like to extend a special thanks to our speakers for their time and efforts, to our sponsors for their kind support, and to all of you who have made this possible. We hope it will be an exciting, informative, and memorable experience. We hope that while you are here on our campus for the conference, you will also find opportunities to enjoy the unique environment that is California State University, Chico. Our commitment to sustainability surrounds you, from the restoration of native species along the creek to our LEED certified buildings, from the co-curricular activities of our students to the faculty dedication to sustainability education, from the efforts of food services to implementation of best practices facilities management. Again, welcome and enjoy this opportunity to share ideas as we grow to a more sustainable future.

## THURSDAY, MARCH 6 AT A GLANCE

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### CONFERENCE SCHEDULE

8 AM – 2 PM	Registration & Check-in	BMU Auditorium Lobby
8 – 10 AM	Continental Breakfast	BMU Auditorium
9 – 9:50 AM	Concurrent Sessions <i>page 8</i>	BMU 204 – 314, SSC 150
10 – 10:50 AM	Concurrent Sessions <i>page 9</i>	BMU 204 – 314
10 – 10:50 AM	<b>Tour</b> Compost Display Area <i>page 9</i>	BMU North Entrance
11 – 11:50 AM	<b>Featured Speaker</b> Michael Dimock <i>page 5</i>	BMU Auditorium
12 – 12:50 PM	<b>Special Event</b> Greenie Awards Poster Competition <i>page 5</i>	BMU Auditorium
1 – 1:50 PM	<b>Featured Speaker</b> John Ikerd <i>page 5</i>	BMU Auditorium
2 – 2:50 PM	Concurrent Sessions <i>page 11</i>	BMU 204 – 314
3 – 3:50 PM	Concurrent Sessions <i>page 12</i>	BMU 204 – 314
4 – 4:50 PM	<b>Keynote Speaker</b> Anya Fernald <i>page 6</i>	BMU Auditorium

## FRIDAY, MARCH 7 AT A GLANCE

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### CONFERENCE SCHEDULE

8 AM – 2 PM	Registration & Check-in	BMU Auditorium Lobby
8 – 10 AM	Continental Breakfast	BMU Auditorium
9 – 9:50 AM	Concurrent Sessions <i>page 14</i>	BMU 204 – 314, SSC 150
10 – 10:50 AM	Concurrent Sessions <i>page 15</i>	BMU 204 – 314
11 – 11:50 AM	Concurrent Sessions <i>page 17</i>	BMU 204 – 314
11:30 AM – 12:50 PM	Local Lunch* <i>page 6</i>	BMU Auditorium
12 – 12:50 PM	<b>Keynote Speaker</b> Karen Ross <i>page 6</i>	BMU Auditorium
1 – 1:15 PM	<b>Special Event</b> Greenie Awards Presentations <i>page 5</i>	BMU Auditorium
1 – 2:50 PM	<b>Tour</b> Campus Sustainability <i>page 7</i>	BMU North Entrance
1 – 1:50 PM	Concurrent Sessions <i>page 18</i>	BMU 204 – 314
2 – 2:50 PM	Concurrent Sessions <i>page 20</i>	BMU 204 – 314
3 – 3:50 PM	<b>Featured Film</b> <i>Treading Water page 7</i>	BMU Auditorium
4 – 4:50 PM	<b>Keynote Speaker</b> Dayna Baumeister <i>page 7</i>	BMU Auditorium
5:30 – 8:30 PM	Environmental Coalition Gathering <i>page 21</i>	CARD Community Center

## SATURDAY, MARCH 8 AT A GLANCE

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### CONFERENCE SCHEDULE

7:30 AM – 9 AM	University Farm Breakfast* <i>page 22</i>	University Farm Pavilion
9 – 9:30 AM	Local Food Systems Discussion <i>page 22</i>	University Farm Pavilion
9:30 AM – 12 PM	Farm Tour Round Robin <i>page 22</i>	University Farm
12 – 1 PM	Local Brown Bag Lunch* <i>page 23</i>	Bertagna Orchards & Vineyards
1 – 3 PM	<b>Tour</b> Bertagna Orchards & Vineyard and Baja Vaca Ranch <i>page 23</i>	Bertagna Orchards & Vineyards
2 – 3 PM	<b>Tour</b> GRUB Co-Op <i>page 23</i>	GRUB Cooperative

\*Separate fees apply

This Way To  
Sustainability IX



KEYNOTE  
SPEAKERS



SUSTAINABILITY  
IN EDUCATION



EMERGING IDEAS



SUSTAINABLE FOOD  
& AGRICULTURE



BUSINESS & ECONOMIC  
STRATEGIES



FEATURED  
FILMS



ENERGY, WATER &  
CLIMATE ISSUES



SUSTAINABLE  
LIFESTYLE GOALS



TOURS

## GREENING OF THE CONFERENCE

*Sustainability is the mission of the conference content and operations. We have taken the following measures to ensure that the conference reflects those principles:*

- Asked presenters to limit paper handouts during sessions
- Implemented a mobile application to limit the number of programs printed
- Printed posters and programs on Green Seal Certified "Environment" paper, made from renewable energy and containing 100% post-consumer chlorine-free fiber
- Implemented a 100% electronic check-in and ticketing system
- Reused lanyards and wristbands from previous years
- Provided only reusable and compostable dishware at all meals
- Consciously chose foods that were seasonal, local, and organic when possible, including produce from our own University Farm
- Used bulk condiments (no single servings)
- Obtained all food from the greater North Valley when possible
- Suggested participants stay in downtown Chico so they are within walking distance of the campus
- Used reusable or compostable decorations
- Provided recycling and compost bins throughout the conference
- Collected all food waste during meal preparation for composting
- Provided options for moderators to limit light during sessions
- Limited meat choices and offered vegetarian and vegan options for conference meals
- Removed trash cans from session rooms to encourage zero waste
- Created and encouraged a carpooling system using Zimride

This Way To Sustainability<sup>SM</sup> IX programs, posters, and postcards are printed on green seal certified environment<sup>®</sup> pc 100 white. Made with 100% post-consumer fiber; mill process, including packing are environmentally preferable.

[www.greenseal.org](http://www.greenseal.org)



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THURSDAY 11–11:50 AM



**MICHAEL DIMOCK**  
President of Roots of Change

BMU  
Auditorium

*Perspectives on 21st-Century Agriculture by a Member of the Good Food Movement*

Today, many people in the nation and world are struggling with one another over the future of the food system. No matter what side of that struggle, all agree that, in the coming century, humans will need to produce more food with less land and water and more expensive fossil fuel. The challenge is great, the stakes high, and the struggle increasingly passionate. Michael Dimock will offer clarity on the core motivations underlying the food movement as well as some principles that could offer a bridge to all sides seeking resolution and a way forward to sustainability.



THURSDAY 12–2 PM



**GREENIE AWARDS**  
Poster Competition Presentations

BMU  
Auditorium

**Voting Open Until 2 PM in the BMU Auditorium**

Each year through our Greenie Awards we recognize businesses, individuals, students, nonprofit organizations, or community members in their successful efforts of working toward a sustainable future. This year, we will recognize student groups from North State colleges and universities and Chico Unified School District grades K-12.

Voting will take place during the conference on Thursday, March 6, ONLY in the Bell Memorial Union Auditorium until 2 PM. Student groups will have an opportunity to present their posters between 12–1 PM only.

*Winners will be announced Friday at 1 PM after the Local Lunch in the Bell Memorial Union Auditorium.*

THURSDAY 1–1:50 PM

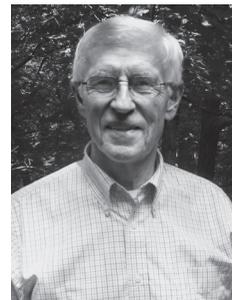


**JOHN IKERD**  
Professor Emeritus of Agricultural Economics, University of Missouri, Columbia

BMU  
Auditorium

*The Sustainability Revolution: Food as a Means and a Metaphor*

Sustainability is not just a passing trend or fad but in fact may prove to be the defining issue of the 21st century. When we ask the question of sustainability objectively and honestly, we must conclude that we are not meeting the needs of many people of the present and certainly are not ensuring equal opportunities for those of the future. Nowhere is the lack of sustainability more obvious or more critical to the future than in the production and distribution of food. Nowhere are the metaphors for a new sustainable economy and society more clear or the means more compelling than in the sustainable food movement. It's time for a sustainability revolution, and food provides both the means and metaphor for fundamental change.



**Book signing to follow in the BMU Auditorium**

THURSDAY 4–4:50 PM



BMU Auditorium

ANYA FERNALD

Cofounder and CEO, Belcampo

Anya is the cofounder and CEO of Belcampo, agricultural companies that strive to make food the old-fashioned way. Anya has been recognized as one of the *40 Big Food Thinkers 40 and Under* by *Food & Wine Magazine*, named a “Nifty Fifty” by *T*, the *New York Times* style magazine, and appeared as a regular judge on *Iron Chef America* on the Food Network. She has directed a statewide Farm-to-School initiative; launched the California Buy Fresh, Buy Local campaign; and more.



FRIDAY 11:30 AM–12:50 PM



BMU Auditorium

LOCAL AND ORGANIC LUNCH

Starting at 11:30, a local lunch will be served buffet style in the Bell Memorial Union. Advance registration and payment for the lunch is required.

**Additional fee of \$12 per person.**

**Local Lunch Menu:**

Local spring mix salad with balsamic vinaigrette with the following:

- *Niman Ranch medium rare sliced steak served on the side (local grass-fed beef)*
- *Fresh beets, asparagus, tomatoes and assorted squash*
- *Certified organic gluten-free pesto pasta made with quinoa*

Also served with:

- *Homemade freshly baked Sutter Roll*
- *Santa Cruz and R.W. Knudsen beverages*
- *Iced tea and ice water*

FRIDAY 12–12:50 PM



BMU Auditorium

KAREN ROSS

Secretary, California Department of Food and Agriculture

Karen Ross was appointed Secretary of the California Department of Food and Agriculture in 2011 by Governor Edmund G. Brown Jr. Secretary Ross served more than 13 years as president of the California Association of Winegrape Growers (CAWG). Among Secretary Ross’ many achievements at CAWG was the creation of the nationally recognized Sustainable Winegrowing Program, which assists wine grape growers in maintaining the long-term viability of agricultural lands and encourages them to provide leadership in protecting the environment, conserving natural resources, and enhancing their local communities.



FRIDAY 1–2:50 PM



BMU  
North  
Entrance

### CAMPUS SUSTAINABILITY WALKING TOUR

Led by Fletcher Alexander, Sustainability Coordinator, CSU, Chico

This walking tour of campus will highlight sustainability efforts from LEED-certified buildings and alternative transportation initiatives to waste diversion efforts and sustainability programming in the Associated Students, University Housing, and more! Join us and learn about sustainability on the CSU, Chico campus from the folks who work on it every day!

FRIDAY 3–3:50 PM



BMU  
Auditorium

### TREADING WATER

Directed by Jesse Dizard

Facing an uncertain future, Californians confront their own reflection in the mirror of water scarcity. In the new normal of what once was the California dream, activists, commercial fishermen, farmers, Indians, and local politicians share their anxieties and reveal their values in an effort to find common cause, if not always common ground. *Treading Water* is about underground aquifers and what some have called the impending threats to California's water resources in the form of hydraulic fracturing ("fracking") and plans to use such aquifers as subsurface reservoirs or water "banks." Groundwater is mysterious; no one knows quite where it comes from or how it got there, or even the amount of water available. Interviews with experts and other community members construct a narrative detailing the critical role that groundwater has come to play in California's economy, and why it is so important for people to understand the intricacies of fragile ecosystems that have and must continue to support it.



**This 25 minute film will be followed by a Q&A with director Jesse Dizard.**

*\* Limited quantity of promotional copies of the film will be available following the film in BMU Auditorium.*

FRIDAY 4–4:50 PM



BMU  
Auditorium

### DAYNA BAUMEISTER

Cofounder and Keystone of Biomimicry 3.8

#### *The Wisdom of a 3.8-Billion-Year-Old Story*

The path to sustainability is a trail well tread by millions of species for billions of years. We are not alone in striving toward ways to be well-adapted inhabitants of this planet. Biomimicry, an emerging discipline that seeks to consciously emulate nature's genius, offers a practical and paradigm shifting approach to sustainability. Dayna's presentation will share well-adapted success stories while painting a picture for life-sustaining paths forward.





SSC 150

**WHAT DOES “LOCAL FOOD” MEAN TO CONSUMERS?**

**Maria Giovanni, Department of Nutrition and Food Science at CSU, Chico**

This presentation will begin with the results of a survey, sponsored by the Northern California Regional Land Trust, of North State residents regarding their understanding, behavior and thoughts about “Local Food”. The second part is a group discussion about barriers and facilitators to producers and consumers regarding local food.



BMU 204

**SUSTAINABILITY SCIENCE**

*An Emerging Discipline*

**Dr. James Pushnik (conference host), director of the Institute for Sustainable Development, CSU, Chico**

Sustainability science is an area of inquiry that addresses sustainability and development through the linked interactions between global, social, and human levels. Individuals educated in this transdisciplinary model will become vital to future development strategies.



BMU 209

**COMMUNITY SOLAR**

*SB43 and Opportunities for the City of Chico*

**David Gallo, Department of Economics, CSU, Chico**

Passage of SB 43 presents a unique opportunity for the City of Chico. A community solar project for the city would reduce utility costs by 50 percent for over 6,000 households and reduce CO<sub>2</sub> emissions by one-half-million tons over the life of the project.



BMU 210

**HEIFER INTERNATIONAL**

*Heifer International Empowers Small-Holder Farmers to Feed the World with Global Sustainable Livelihoods*

**Jessica Lundberg, Lundberg Family Farms; Suellen Rowlison and Shar Sentell, Heifer International**

Presenters will focus on just and sustainable agriculture and community development in Asia, South America, East Africa and the United States and explain how Heifer International is scaling up its work to have an impact on global sustainable livelihoods.

**SHERWOOD MONTESSORI'S K–8 GARDEN AND KITCHEN PROGRAM**

**Richie Hirshen, Michelle Yezbick, and John Howlett, Sherwood Montessori Charter School**

These educators will be sharing their experience over the past four school years with those interested in supporting, starting, or expanding their own school garden-kitchen program through the culinary and nutritional arts and sciences, permaculture, agripreneurism, journalism, philanthropy, and community outreach. They will also discuss their new solar oven and green direction.

**Book signing to follow in BMU Auditorium**

**EXPERIMENTS WITH MYCOLOGY AND OIL**

**Andi Goss, Chris Tominello, and Chauncey Quam, Symbiotic Solutions**

Symbiotic Solutions is a student club at Butte College. Currently, members are executing experiments to test the capability of oyster mycelium to break down motor oil. They plan to use their data to develop mycorestoration projects on campus and teach others about the amazing characteristics and restorative abilities of fungi.

**DEMAND IS ADDICTION**

**Fred Klammt, WinSol**

We, as humans, are addicted to 24/7 instant everything: energy, transportation, communication, eating, entertainment, etc. The solution is to reduce our eco-footprints while having minimal impact on our comforts. This presentation will focus on using appropriate technology and ancient wisdoms. Case studies and examples of communities living with fewer than three earths will be presented.

**BRINGING DOWN THE NEW JIM CROW**

*Prerequisite for a Sustainable Future*

**Chris Moore-Backman, Chico Peace and Justice Center**

The United States incarcerates more people than any society in human history (currently 2.5 million people), an overwhelmingly disproportionate number being impoverished people of color. What are the implications of this “new Jim Crow” reality for the sustainability movement? Can sustainability be achieved without an end to mass incarceration?



BMU 211



BMU 303



BMU 304



BMU 312



BMU 314

**WASTE SYSTEMS AND ATTITUDES SURROUNDING LARGE-SCALE ATHLETIC EVENTS IN AN URBAN SETTING**

**Halli Bovia, University of Southern California**

University of Southern California recently took over operations of the Los Angeles Memorial Coliseum. This presentation will go over successes and failures of working within the Trojan culture of athletics to facilitate behavior change.

Conference sponsor:

**Rawlins Endowed Professorship**

The Professor of Environmental Literacy, a position made available through the Rawlin's Endowed Professorship, has the responsibility to prepare all students of all majors, across the campus, for dealing with a world environment which is being continually diminished by loss of species, disappearance of habitats, and degradation of air, water, and soil. The conference host and director of the Institute for Sustainable Development, James Pushnik, is currently the Rawlins Endowed Professor of Environmental Literacy.



SSC Plaza Stage

**CULTIVATING COMMUNITY IN ACTION**

**Kaycee Green, Kyle Riddle, Lindsey Holmberg, Cultivating Community Project; Karen Goodwin, Center for Nutrition and Activity Promotion, CSU, Chico; and Stephanie Elliott, GRUB Education Program**

**10 AM–3 PM (full day outside)**

Cultivating Community North Valley will be presenting an interactive workshop featuring each component of the food security project. You will be invited to plant spinach, shop at the OVP market, learn and sample a new delicious recipe, and even receive a \$15 EBT coupon, good for fresh produce!

**NORTHERN SACRAMENTO VALLEY INTEGRATED WATER MANAGEMENT PLANNING**

**Vickie Newlin, Butte County Water and Resource Conservation**

This presentation will tell the story of the Northern Sacramento Valley Integrated Regional Water Management Planning Process. The group is currently finishing up the development of an Integrated Regional Water Management Plan to address the management and integration of water and other natural resources within the region.



BMU 209



BMU North Entrance

**CREATING AND CULTIVATING A GARDEN AND COMPOST FACILITY**

**Matthew Navarro and Bri Mulvey, AS Sustainability, CSU, Chico**

Campus and community gardens provide people with a valuable source of healthy foods while allowing citizens to dispose of organic wastes in a responsible and useful manner. Our workshop will follow the development of the CSU, Chico Compost Display Area and Garden, ultimately leading to a discussion on how others could start their own gardens in their communities and campuses.

**LOOKING AHEAD TOWARD GREATER COMMUNITY FOOD SECURITY**

**Lee Altier and Kaycee Green, College of Agriculture, CSU, Chico; Julie Estep, Adept Professional LLC; Stephanie Elliott, GRUB; and Karen Goodwin, Center for Nutrition and Activity Promotion, CSU, Chico**

As the Cultivating Community project completes its final year, we are looking for opportunities to continue its momentum. This session will be an open discussion to explore how to sustain collaborative efforts toward a stronger food system.



BMU 210



BMU 204

**TEACHING POPULATION NOW**

**Jacquelyn Chase, Department of Geography and Planning; David Eaton, Department of Anthropology; and Tony Waters, Department of Sociology, CSU, Chico**

Three scholars discuss how they bring a global awareness of population into the classroom through a critical understanding of the complex cultural, geographical, social, and historical relationships that underlie population dynamics and their links to the environment.

**NOT JUST A CUP, BUT A JUST CUP**

**Paul Katzeff and Mischa Hedges, Thanksgiving Coffee Company; Amy Louis and Mandy Pearson, Six Degrees Coffee**

Coffee is a resource-intensive drink and is grown almost exclusively in developing countries in a small band around the equator. Climate change is becoming an increasing threat to coffee farmers worldwide. Learn how you can make a difference in the world with the coffee you choose to drink.



BMU 211



**BMU 303**

**ON-SITE COMPOSTING AT AN ORGANIC FARM: WHY BOTHER?**

**Alfred Courchesne, Frog Hollow Farm**

Frog Hollow Farm will be used as a case study of on-site composting in Brentwood, California. The presentation will outline the steps that have been taken to reduce its impact on the environment as well as to keep its soil healthy through thermophilic and vermicomposting processes.



**BMU 304**

**REAL FOOD CHALLENGE**

**Christina Ellis and Danielle Adler, Real Food Challenge and Grace Kerfoot, AS Dining, CSU, Chico**

This presentation will discuss what Real Food Challenge is and how it will affect Chico State. This presentation will also discuss how incorporating local foods will affect Chico as a community.



**BMU 312**

**DEVELOPING A CAMPUS SUSTAINABILITY PLAN**

**Helen Cox and Sarah Johnson, CSU, Northridge**

This presentation will review the process of developing a 10-year sustainability plan for CSU, Northridge that addresses both education and operations. The plan has 10 focus areas that discuss current institutional practices, goals, and action items. Plan implementation began this year with a list of priority items.



*Featured Speaker*  
**MICHAEL DIMOCK**

**THURSDAY  
11–11:50 AM**

*page 5*



**BMU  
Auditorium**

*Special Event*  
**GREENIE AWARDS  
POSTER PRESENTATIONS**  
*Winners will be announced Friday at 1 PM after  
the Local Lunch in the BMU Auditorium.*

**THURSDAY  
12–2 PM**

*page 5*



**BMU  
Auditorium**



*Featured Speaker*  
**JOHN IKERD**

**THURSDAY  
1–1:50 PM**

*page 5*



**BMU  
Auditorium**

*Conference sponsor:*



[www.sierranevada.com](http://www.sierranevada.com)

At Sierra Nevada Brewing Co., sustainability means recognizing the impacts associated with operations and making a conscious effort to reduce them. Sierra Nevada is committed to leaving the smallest footprint possible without jeopardizing their high standards for quality. They strive to maintain a healthy balance between environmental stewardship, social equity, and economic stability. The sustainability program at Sierra Nevada extends to every facet of the company from barley to bottle and into your refrigerator. Their basic approach is to “close the loop” wherever and whenever possible. They look for opportunities to bring materials leaving their facility – such as heat, water, and packaging – back into the production process and their zero waste goal emulates sustainable natural cycles in which discarded materials are resources, not wastes.



BMU 204

### RARE: RECYCLING AND RUBBISH EDUCATION IN BUTTE COUNTY

**Tanya Parish, Recycling and Rubbish Education Program**

Recycling is easy! It is the one action that every person can do to reduce waste going to the landfill and keep local ecosystems and watershed healthy. RARE will provide an overview on recycling practices and give ideas to help empower individuals to recycle in Butte County.



BMU 209

### TWO-PART PRESENTATION:

#### PART I: PROJECT RHAB (RICE HULLS AS ALTERNATIVE BUILDING)

*Achieving Sustainability Through Use of Rice Hulls in Building Materials*

**Maria Elena (Nena) Anguiano, Butte College**

Interns report on the progress of an EPA P3 (People, Prosperity and the Planet) Award-winning project by the MESA (Mathematics Engineering Science Achievement) Program. The focus is to explore ways to utilize rice hulls to create a sustainable building material. They will present research findings and practical applications of this sustainable technology.

#### PART II: PROJECT REGEN (RICE-HULLS AS ENERGY GENERATION)

*Achieving Sustainability Through Use of Rice Hulls Through Gasification and Biochar Energy Generation*

**Maria Elena (Nena) Anguiano, Butte College**

Interns present on the progress of an applied research project at Butte College by the MESA (Mathematics Engineering Science Achievement) Program. They are completing research focused on the pyrolysis of rice hulls and the production of biochar. They will discuss research findings and practical applications of this sustainable technology.

### CSU, CHICO CAMPUS SUSTAINABILITY PLAN PANEL DISCUSSION AND DEVELOPMENT WORKSHOP

**Fletcher Alexander, Institute for Sustainable Development at CSU, Chico and members of the Campus Sustainability Committee**

CSU, Chico's Campus Sustainability Committee is working on the development of a long-range Campus Sustainability Plan that addresses a range of key focal areas including: Education & Research; Waste, Recycling & Procurement; Food Services; and Transportation. This workshop will be an open forum for campus students, staff and faculty to provide input on the plan and its different components.

### GROWING LOCAL FOOD ECONOMY IN BUTTE, GLENN, AND TEHAMA COUNTIES

**Jacob Brimlow, College of Agriculture, CSU, Chico, and Noelle Ferdon, Northern California Regional Land Trust**

This presentation will discuss recent research into the barriers limiting local food economy in the tri-county region and describe current projects aimed at removing those barriers, including the development and launch of the North Valley Food Hub online marketplace.

### THE PURSUIT OF HAPPINESS

*Finding a Job in Sustainability*

**Michael Kane, Sierra College**

The pursuit of happiness is considered a fundamental part of the American experience. Career pathways, given most people work 2,000 hours a year or more, play a significant role in our overall happiness. This talk will explore some of the key elements of authentic happiness, how happiness can be found in the work you do, how to increase your personal happiness, and the personal rewards of working for sustainability as well as provide some excellent resources to help students and professionals find work in the field of sustainability.



BMU 210



BMU 211



BMU 302

Conference co-host:



ASSOCIATED STUDENTS | *csu, chico*

AS Sustainability establishes and operates sustainability projects for the Associated Students and promotes eco-awareness on campus. The AS Sustainability Fund Committee (SFAC) provides funds toward sustainability-related, student-driven projects. Since 2009, SFAC has funded 103 projects for a total of over \$250,000. To learn more about AS Sustainability, visit <http://www.aschico.com/sustainability>.



BMU 303

**TWO-PART PRESENTATION:  
PART I: SUSTAINABLE PLASTICS**

*Life Cycle Assessment of Biobased and Recycled Plastics*

**Dr. Joe Greene, Mechanical and Mechatronic Engineering and Sustainable Manufacturing Department, CSU, Chico**

Plastics can be sustainable by producing products with reduced greenhouse gas emissions, reduced solid waste, and reduced pollution as compared to conventional plastics. Based on cradle-to-grave LCA, PLA plastic containers had lower greenhouse gases, lower waste generation, and lower pollution than virgin and recycled PET containers.

**PART II: 3-D PRINTED FROM CRADLE TO CRADLE**

**Marco Poort, Electrical and Computer Engineering Department, CSU, Chico**

3-D printers are becoming more affordable and may someday become a common household appliance. Not only are they interesting in the variety of things they can print but also in the fact that old plastic parts can be melted, spooled, and made into new parts.



BMU 304

**HOW TO START A COMMUNITY GARDEN IN YOUR OWN TOWN**

**Mark Stemen, Department of Geography and Planning, CSU, Chico, and Chair, Butte Environmental Council**

Have you ever wanted to start a community garden? This presentation will cover the history of the Butte Environmental Council's Humboldt

Community Garden from inception to completion. The presenter will pay particular attention to negotiating for public land, local land-use requirements, financing, and ways to structure garden membership.

**ORGANIZING FOR FIBER**

**Wendy Ardell and Sherri Scott, GRUB; Duri Van Alstyne, Jaci Siehl, and Sandy Fisher, Mt. Lassen Fiber Guild**

Chico Cloth's mission is to create unique fabrics made from bioregional sources of fiber, locally designed and woven, that would be recognized and used by the community. This panel will discuss processes and collaborations of local farmers, toolmakers, woolgrowers and processors, weavers, and interested community members.



BMU 312

**NOVATORQUE: A SUPER EFFICIENT ELECTRIC MOTOR**

**Bruce Baccei, SMUD**

NovaTorque brushless permanent magnet (BPM) motors offer significant advantages over induction motors for applications that require variable speed operation. Controlled bench tests compare high efficiency electric motors to NovaTorque showing 7 percent to 22 percent annual energy savings, delivering efficiency beyond that of the induction motor at a comparable cost.



BMU 314



BMU 204

**SOLAR INNOVATIONS AND SOCIAL JUSTICE**

**Becca Russell, GRID Alternatives**

The solar industry is expanding and is made up of many different components. This session will discuss two of them: uprising innovations in solar technology and social justice in the solar industry. GRID Alternatives and other organizations will be highlighted to demonstrate the social justice activities.

**SUSTAINABILITY EDUCATION FOR A CROWDED WORLD**

**Elaine Gorman, Population Connection**

A sustainable future starts with a sustainable population. Discover thought-provoking, hands-on teaching activities that can be used with groups of all ages to examine world population trends and their impact on land use, food and water availability, biodiversity, climate change, and more.



BMU 209



BMU 210

**GREEN SPEED NETWORKING**

**Chris Kaiakapu and Amanda Leonis, PowerSave Campus Chico; Marie Patterson, Angela Casler and Fletcher Alexander, CSU, Chico; Mark Roberts, Springboard Biodiesel; Colleen Butterfield, Alliance to Save Energy; and Robyn DiFalco, Butte Environmental Council**

Speed networking!—like speed dating but with students and professionals. This session is a quick, interactive experience for students to survey the range of opportunities that are available in today’s expanding sustainability workforce. Attendees will gain career insight directly from professionals and learn about the experiences that got them there.



BMU 211

**OOPS, I DID IT AGAIN**

*Over Built, Over Allocated, and Drained California Water Systems*

**Nani Teves and Carol Perkins, Butte Environmental Council**

One hundred years of manipulating California’s natural water systems and we have hit a fork in the road. Will we reevaluate how we manage water? Will we continue to solve water problems with huge engineering projects, or will we create an equitable sustainable water future based on conservation and regional self-sufficiency?



BMU 303

**IN-SERVICE SCIENCE TEACHER PROFESSIONAL DEVELOPMENT IN EDUCATION FOR SUSTAINABILITY (EFS)**

*Preconceptions, Methodologies, and Strategies for Comprehensive Adoption of Curricula*

**Timothy Goodale, North Carolina State University**

The focus of this presentation centers on the evaluation and outcomes of a professional learning opportunity that has sought to inform current K-12 science educators on the concept of Education for Sustainability. Outcomes will underscore several methods and strategies for successful science teacher professional development implementation in regard to sustainability.



BMU 304

**CONSUMER PREFERENCE FOR LOCALLY GROWN PECANS**

**Amie French, College of Agriculture, CSU, Chico**

Although Northern California has access to an abundant variety of locally grown commodities, pecans are not among them. Less than 1.6 percent of the nation’s crop originates from California. This project partners with Gorrill Ranch, a local fourth-generation family farm, to identify the consumer preference for locally grown pecans.



BMU 312

**TWO-PART PRESENTATION:**

**PART I: URBAN AGRICULTURE AND FOOD GARDEN**

**Mario Giraldo and Daniel Aguiar, CSU, Northridge**

This presentation will discuss the CSU, Northridge Institute of Sustainability’s efforts on implementing a program for kitchen waste composting and gardening. The program is run and operated by volunteer students and it generates opportunities to engage students in food security and food production within a large metro area.

**PART II: CSU, NORTHRIDGE SUSTAINABLE OFFICE PROGRAM (SOP)**

**Mechelle Best and Stephen Low, CSU, Northridge**

The Best Practices in Sustainability course teaches students to conduct assessments and utilizes service learning. To partially fulfill the service requirement and practice their skills, students conduct Sustainable Office Program (SOP) assessments. Our presentation showcases the SOP and video series created to increase awareness and encourage staff and faculty participation.

**FOOD WASTE**

*Causes and “Root to Stalk” Solutions*

**Karen Goodwin and Naomi Stamper, Center for Nutrition and Activity Promotion, CSU, Chico**

Food waste costs us economically and environmentally. Many of the solutions are beyond our political power, but individually, we can control our own waste each day by learning how to use more with the food we have. A “Root to Stalk” cooking demonstration will provide a tasty example of how.



BMU 344



*Keynote Speaker*  
**ANYA FERNALD**

THURSDAY  
4–4:50 PM

page 6



BMU  
Auditorium



SSC 150

**GROWING AN ONLINE  
“SUSTAINABLE” CAREER**

**Mary Clare Hunt, In Women We Trust**

What’s your career digital footprint strategy? How do you blend your sustainable interests with the ever-changing social media landscape? Eco- and social-media visionary Mary Hunt will cover touchpoints that must be mastered and overview three things to link in and not lock out opportunities over your career lifetime.



BMU 204

**DIY SUSTAINABILITY WORKSHOP**

*What is SCOOP?*

**Kerrie Feil-Olson, Steven Pina Sanchez, and Whitney Wright, SCOOP, CSU, Chico**

This presentation will focus on the tool that is used for SCOOP’s consultations. The criteria that they provide can help anyone and everyone decrease their ecological footprint and increase environmental awareness. They will also discuss what SCOOP is, what they do, and provide opportunities for those interested in joining them.



BMU 209

**GET CERTIFIED IN SUSTAINABILITY  
MANAGEMENT**

**Angela Casler, College of Business, CSU, Chico**

Join the Sustainability Management Association (SMA) in transforming leadership to manage for a healthy economy, environment, and society. The SMA is a professional association whose members strive to make a positive difference. The SMA accredits professionals and students in the knowledge, skills, and abilities needed to manage for sustainability.



BMU 210

**PART I: OVERVIEW OF PROJECTS:  
ENHANCING THE VIABILITY OF SMALL  
FARMERS EVERYWHERE**

*An International Perspective on Sustaining Local Food Production*

**Lee Altier and Betsy Boyd, College of Agriculture, CSU, Chico; Francisco Fonseca, Educative Centre for Costa Rican Development; Manuel Amador, CORP. EDUCATIVA PARA EL DESARROLLO COSTARRICENSE; and Salvador V. Garibay, Research Institute of Organic Agriculture, Switzerland**

Several projects currently underway in Latin America and Europe are exploring opportunities to reward farmers by promoting the stewardship they provide in enhancing biodiversity and sequestering soil carbon. These projects are based upon the premise that efforts to enhance farmers’ economic

well-being must be linked to regenerating and conserving the natural capital of their regions and the sustainability of their production. This session will describe the process of generating the involvement of farmers and the opportunities for enhancing sustainability.

**Part 2 to follow at 10 AM**

**THE PROOF IS IN THE PASTURE**

*Science Shows the Benefits of Pasture-Based Farming for People and Planet*

**Jonathan Reinbold, Organic Valley**

Recently published results from the most comprehensive U.S. study of milk’s essential fatty acid composition demonstrates a powerful relationship between farming and nutrition. These findings, in conjunction with additional research focused on greenhouse gas emissions, illustrate how pasture-based dairy practices can improve our health and mitigate climate change.

**MAKING THE MOST OF ENERGY  
INCENTIVES, REBATES, AND GRANTS**

*A Los Rios Community College District Case Study*

**Courtney Ward, RetroCom Energy Strategies**

Los Rios Community College District has enabled calendar-based air handler operation by interfacing the course scheduling system (PeopleSoft) to their energy management system (EMS). In addition to the upgrades and Demand Response connection, Los Rios has implemented energy-saving measures. This presentation will cover maximizing the capabilities and possibilities of any EMS at your facility.

**BUILDINGS THAT TEACH**

*Integrating Sustainability, Building Design, and Curriculum Within the Built Environment*

**David Younger and Jonathan McMurtry, Lionakis; Erik Winje, DPR Construction; and John Ellis, Cosumnes River College**

Cosumnes River College turned to a design-build competition collaboration between users, architects, and contractors to provide architecture and construction management students with hands-on learning opportunities. The result was a LEED Platinum building where curriculum and students informed the design, the design informed sustainability, and sustainability informed curriculum for future generations.



BMU 211



BMU 303



BMU 304

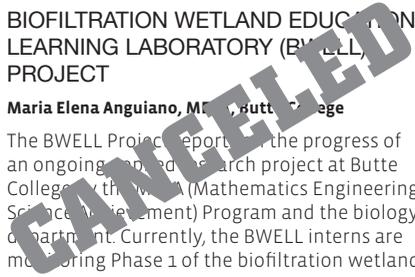


BMU 312

**BIOFILTRATION WETLAND EDUCATION LEARNING LABORATORY (BWELL) PROJECT**

**Maria Elena Anguiano, MEd, Butte College**

The BWELL Project reports on the progress of an ongoing funded research project at Butte College of the BWELL (Mathematics Engineering Science Achievement) Program and the biology department. Currently, the BWELL interns are monitoring Phase 1 of the biofiltration wetland.



**IMPLEMENTING YOUR VISIONS WITH BUSINESS AND LEADERSHIP PRACTICES**

**Abbas Mohamed and Zehra Reza, fieldstudy**

This presentation will delve into various business and leadership skills that will allow you to be better equipped in implementing your sustainable visions into manageable goals with tangible results. The speakers will approach several skills including SMART goal planning, professional communication, and effective meeting leadership.



BMU 314



BMU 204

**GREEN HARMONY (SPOOF) DATING GAME SHOW**

**Kerrie Feil-Olson, Steven Pina Sanchez, Whitney Wright, and other SCOOP team members**

Please join SCOOP for its second annual Green Harmony Dating Game Show (spoof) with honorable guests Careless Caroline, Kinda Karlie, Sustainable Sara, Environmental Evan, and your host, Matchmaker Mindi!



BMU 209

**MUSHROOMING SUCCESS**

**Angela Casler, Diana Flannery, and Michael Rehg, CSU, Chico; Kevin Foley, Premier Mushrooms; and Danielle Buis**

Set yourself up for success and learn about the curriculum that prepares you for the future. The College of Business minor in Managing for Sustainability will do just that. The career path in sustainability management spans from a sustainability coordinator, to director, to chief sustainability officer.

**PART 2: INTERNATIONAL COLLABORATION: ENHANCING THE VIABILITY OF SMALL FARMERS EVERYWHERE**

*An international perspective on sustaining local food production*

**Lee Altier and Betsy Boyd, College of Agriculture, CSU, Chico; Francisco Fonseca, Educative Centre for Costa Rican Development; Manuel Amador, CORP. EDUCATIVA PARA EL DESARROLLO COSTARRICENSE; and Salvador V. Garibay, Research Institute of Organic Agriculture, Switzerland**

Several projects currently underway in Latin America and Europe are exploring opportunities to reward farmers by promoting the stewardship they provide in enhancing biodiversity and sequestering soil carbon. This session will explore the progress of these projects and examine opportunities for collaboration in support of small farmers in California and elsewhere.



BMU 210

**SUSTAINABILITY FUN FACTS:**

1. CSU, Chico took first place in last year's California PowerSave League of the nationally coordinated Campus Conservation Nationals residence hall energy reduction competition. With a reduction of over 12 percent from their baseline, the residents of Shasta & Lassen Halls beat out peer competitors at 10 UC and CSU campuses.
2. CSU, Chico's award-winning residence hall move-out waste diversion program, 'Diversion Excursion,' diverted over 20,000 pounds of material from the landfill last year—the 14th year the program has been coordinated.





BMU 211

### MARKETING FOR SUSTAINABILITY

*How to Utilize Facebook in Building Your Organization and Educating Your Audience*

**Samantha Duncan and Justin Flick, AS Sustainability, CSU, Chico**

In today's interconnected world, it can be difficult to break all the noise and reach an audience. This presentation will discuss effective use of Facebook and other social media sites in combination with on-the-ground marketing techniques to build your organization's reach to educate your audience in sustainability.



BMU 302

### HELP! CREATE A WORLD THAT WORKS FOR US ALL

**Rich Silver and Scott Terrell, University of Earth**

Would you like to help create a sustainable society, fulfill your greater potential and true purpose, and earn a living, all at the same time? Please join University of Earth staff as they present their innovative new model for creating a world that works for us all.



BMU 303

### WATER, HOPS, AND GRAPES FROM SOIL TO PLATE

**Pete Bonacich, California Water Services; Aimee Sunseri, New Clairvaux Vineyard; and Lau Ackerman, Sierra Nevada Brewing Co.**

Join this panel to meet California Water Service Company, New Clairvaux Vineyard, and Sierra Nevada Brewing Co. Come learn how you can conserve water in the home or office while protecting the aquifer with smart landscaping and irrigation choices.

### FOODCORPS

*How the Service Model Can Impact Children's Relationship with Food*

**Emily Koller, FoodCorps**

FoodCorps is a nationwide team of leaders that connects kids to real food and helps them grow up healthy. This presentation will look at how using the service model enables FoodCorps to collaborate with community partners to impact children's health while also building leadership in the food movement.

### CENTRAL SEASONS

*Life as a Teenage Farmworker in California*

**Bianca Hernandez**

*Central Seasons* is an exploration of the teenage experience in balancing fieldwork with school and family obligations. The presentation will consist of a screening of the short film, followed by a discussion of crucial issues surrounding farm work.

### CALIFORNIA'S ARTISANAL CHEESEMAKING CULTURE

**Grace Kerfoot, AS Sustainability, CSU, Chico**

This is a fun and educational presentation on California's artisanal cheesemaking community. Learn about some local and regional cheese makers, and how to evaluate cheeses and build your own cheeseboard.



BMU 304



BMU 312



BMU 314

California State University, Chico's dining services are featured in a *GoodHousekeeping.com* article rating university and college cafeterias for quality and sustainability. The article can be found at <http://www.goodhousekeeping.com/print-this/home/green-living/greenest-college-cafeterias-4608093>.

California State University, Chico's dining services purchases a large quantity of their ingredients from the Organic Vegetable Project at our University Farm.





BMU 204

**WHAT IS TO BE SUSTAINED? CRITICAL REFLECTIONS ON SUSTAINABILITY**

**Nik Janos, CSU, Chico**

Rather than thinking of sustainability as a singular destination that we hope to arrive at, we should reconceptualize sustainability as multiple unfolding participatory socio-ecological practices. At the heart of this definition is an attention to social inequalities, equity, difference, and the democratic process.



BMU 209

**THE LITTLE ENGINE THAT COULD: HARNESSING THE ECONOMY TO PULL US OUT OF THE CLIMATE DITCH**

**Peter Joseph, Citizens Climate Lobby; The Climate Reality Project**

Climate destabilization is the most serious threat to modern civilization next to global nuclear war and a massive asteroid impact. The energy market's failure to account for the true social costs of burning fossil fuels, which have built our society, can be corrected with a simple mechanism: price carbon pollution.



BMU 210

**AN UPDATE ON LABELING OF GENETICALLY MODIFIED ORGANISMS IN OUR FOOD**

**Jessica Lundberg, Lundberg Family Farms, and Pam Lary**

There have been labeling efforts for Genetically Modified Organisms (GMOs) in 17 states to date and a campaign at the federal level continues to gain support. This presentation will look at GMOs in food production, why there are efforts to label these products, and summarize an update of efforts on labeling.



BMU 211

**SUSTAINABILITY AND PROFESSIONAL DEVELOPMENT AT THE UNIVERSITY**

**Tim Sistrunk, Ellie Clifford Ertle, Diana Flannery, and William Loker, CSU, Chico**

Modern educational institutions should recognize the importance of sustainability by supporting the professional development of faculty and staff along these lines, both financially and in their hiring, retention, and promotion policies. Come and join the conversation to promote and value the skills that are needed to build the sustainable future.

**DEVELOPING A COLD WATER LAUNDERING PROGRAM AT HUMBOLDT STATE UNIVERSITY**

**Johnny Lococo, PowerSave Campus, Humboldt State University**

This presentation details a student-led effort to reduce natural gas consumption by encouraging on-campus residents to use the cold setting on their washing machines at Humboldt State University.



BMU 303

**UNEARTHING YOUR GREEN CAREER**

**Russell Marsan, GreenTraks**

Finding a green career is challenging within this competitive job market. This presentation will provide a competitive attitude and insight when applying for green jobs. Russell Marsan will demonstrate how to create your own job. If you desire a green career, you will not want to miss this informative, inspirational, and entertaining presentation.



BMU 304

**HELP ME, HEMP YOU**

**Jake Wade, Parallel Revolution**

Jake Wade of Parallel Revolution will be conducting an interactive presentation about his sustainable clothing manufacturing business. The emphasis will be on hemp's role as a formidable solution to many of our problems. Main topics will include his story as "Planet Earth's Preferred Outfitter," sustainable textiles, and ethical manufacturing.



BMU 312

**FOODWASTE DIVERSION AS AN EFFECTIVE STRATEGY FOR REDUCING AN INSTITUTION'S ENVIRONMENTAL FOOTPRINT**

**Morgan King and Halley Walsh, Humboldt State University**

This presentation will focus on Humboldt State University's two-tiered food waste diversion program, which employs on-campus composting in an Earth Tub as well as off-campus hauling to a commercial composting facility. The presenter will also discuss the operational, technological, and behavioral change efforts that have led to the program's success.



BMU 314



BMU  
Auditorium

### LOCAL LUNCH AND KEYNOTE PRESENTATION

Starting at 11:30, a local lunch will be served buffet style in the Bell Memorial Union at an additional fee of \$12 per person. Advance registration and payment for the lunch is required.

#### **Local Lunch Menu:**

Local spring mix salad with balsamic vinaigrette with the following:

- *Niman Ranch medium rare sliced steak served on the side (local grass-fed beef)*
- *Fresh beets, asparagus, tomatoes and assorted squash*
- *Certified organic gluten-free pesto pasta made with quinoa*



Keynote Speaker  
**KAREN ROSS**

FRIDAY  
12–12:50 PM

*page 6*



BMU  
Auditorium

Also served with:

- *Homemade freshly baked Sutter Roll*
- *Santa Cruz and R.W. Knudsen beverages*
- *Iced tea and ice water*



BMU  
North  
Entrance

### Special Event CAMPUS SUSTAINABILITY WALKING TOUR

FRIDAY  
1–2:50 PM

*page 7*

Tour Locations:

- *Kendall Hall*
- *Bell Memorial Union (inside)*
- *Bell Memorial Union (2nd Street side)*
- *WREC*
- *Yolo Field*
- *Compost display area*
- *Sutter Plaza*
- *Sutter Dining*
- *Bidwell Mansion*
- *Gateway Science Museum*





BMU 204

**NUCLIO CULTURE FOR THE SUSTAINABLE PRODUCTION OF FOOD, WATER, ELECTRICITY, AND LIQUID FUELS**

**Richard J McDonald, PhD**

NucliOculture is the production of food (aquaculture and hydroponics), water, electricity, and carbon-neutral liquid fuels, based on the efficient use of heat from advanced nuclear reactors (those which burn “waste” and produce no usable weapons material). It should be sustainable for many thousands of years.



BMU 209

**HOW TO CULTIVATE YOUR CAREER, CHICO STATE AND A JOB**

**Rachael Londer and Anais Rodriguez, CSU, Humboldt**

This workshop aims to develop the green workforce by giving tools to students and employers alike. Students will be given resources so that they may strategically look for internship positions in the green workforce. Another facet is providing a framework for green positions for business owners to add to their employment model. The presenters will share best practices of sustainable job cultivation, from both the employer and the intern perspective, that they have observed throughout their internships.



BMU 210

**FOSSIL FUEL DIVESTMENT 101**

**Kaitlin Haley, Kevin Killion, Marli Diestel, and Eric Recchia, California Student Sustainability Coalition**

This presentation will be a collaboration between California universities that discusses what fossil fuel divestment is and how students, faculty, and community members can get involved.



BMU 211

**PLANT BREEDING FOR ORGANIC CROP PRODUCTION**

**Jessica Lundberg and Junda Jiang, Lundberg Family Farms**

This presentation is an overview of plant breeding techniques, global efforts in organic breeding, specific work being done in the United States, and examples of a local California farm, Lundberg Family Farms, which is working with its own organic breeding program to improve rice varieties for use on its farms.

**COMPOSTING AND OTHER SUSTAINABLE CURRICULUM FOR SCHOOL CHILDREN**

**Sally Hedley**

This presentation will help educators and non-educators employ sustainable lessons in and outside of the classroom. The presentation will include information on composting and gardening as well as specific lessons that can help students understand sustainable practices.



BMU 302

**HANDS-ON, MINDS-ON OUTDOOR EDUCATION MODULE TEACHES POPULATION ECOLOGY OF TURTLES TO THIRD-GRADE STUDENTS**

**Ninette Daniele and Jada-Simone White, CSU, Chico**

This group has used ongoing Western Pond turtle research to form a “hands-on, minds-on” module focused on population ecology aligned with stringent standards. Third-grade students learned about mark and recapture techniques, the biology of a native turtle, and the potential threats of invasive species.



BMU 303

**OPENING MINDS ONE BITE AT A TIME**

**Leslie Ellorin**

Learn how small acts can make big change. Come hear about the development of the organically grown Local Grub Club and learn how this type of club can, and is, being replicated, each unique to its community.



BMU 312

**SUSTAINABLE FOOD PRACTICES FOR EVERY EVENT**

**Courtney Silver, Jamie Chino, and Mitchell Hayes, Green Events Consulting Team, CSU, Chico**

Supplying sustainable food options that meet the needs of event attendees is difficult. In this workshop, you will gain valuable skills to find sustainable food options in your area, purchase foods according to season/region, and approach vendors/caterers to meet the needs of your sustainable event.



BMU 314



BMU 204

### THE FUTURE OF FUNGI

**Kevin Foley, Premier Mushrooms Inc.**

This presentation will focus on the more fundamental aspects of mushroom farming and how it intrinsically represents a closed loop system. It will also highlight current efforts on the farm surrounding waste management and recycling, energy, water and GHG.



BMU 209

### IN FRONT OF THE MIRROR

*Assessing Curricular Change*

**Nathaniel Millard, James Pushnik, conference host, CSU, Chico**

California State University, Chico has a new GE Pathway relating to sustainability. The Sustainability Pathway emphasizes a system thinking approach to help students understand and be able to address problems involving the environment and sustainability. The discussion will address the assessment instrument being developed and changes in student enrollment patterns.



BMU 210

### THE ETHICS OF SUSTAINABLE AGRICULTURE FOR 7+ BILLION

**Peter J. Hess, National Center for Science Education, and Michael Hess**

To sustain seven billion people, do we stay with low-yield farming practices? Or should we develop in agricultural technology? With scientific tools and an intercultural, interreligious, and intergenerational ethic, we should strive for agriculture that maximizes genetic diversity, is ecologically sustainable, and is respectful of local autonomy and agricultural customs.



BMU 211

### INTEGRATING SUSTAINABILITY INTO ACADEMICS AND GREEK LIFE

**Martin Figueroa, UC Merced, PowerSave Campus Program**

The PowerSave Campus Program at University of California, Merced is partnering with different courses on campus to develop sustainability academic projects. This presentation showcases developing academic projects, student work, and challenges faced during the organization and implementation of each project.

### SUSTAINABLE COMMUNITY DEVELOPMENT IN VIEW OF RAPID URBANIZATION IN SOUTHEAST ASIA

*A Threat to Global Warming and Food Supply*

**Stephen Feher, Sustainable Community Development Institute**

This is a discussion of challenges and potential solutions to rapid urbanization, especially in Southeast Asia, which threaten global food supply and increase global warming.



BMU 303

### UNDERSTANDING THE LIVING BUILDING CHALLENGE

**Susan Rainier and Neil Steiner, Glumac**

This presentation will discuss The Living Building Challenge, which calls for building projects that operate as cleanly, beautifully, and efficiently as nature's architecture. To be certified under the Challenge, projects must meet performance requirements, including net-zero energy, waste, and water, over 12 months of continuous occupancy.



BMU 304

### AN OMNIVORE'S DILEMMA

*The Myth of the Sustainable Meat Movement*

**Robert C. Jones, CSU, Chico**

Robert Jones argues that advocates of the so-called "humane meat movement," such as Michael Pollan, are confused and misguided. Jones further argues that humane meat is impossible, and that veganism remains a viable, ethical alternative both to the cruelty of current factory farming practices and the ethical confusions of humane meat advocates.



BMU 312

### VERMICOMPOSTING AT A MIDDLE SCHOOL CAMPUS

*A "cradle-to-cradle" approach to food waste*

**Jose Gonzalez, CSU, Chico**

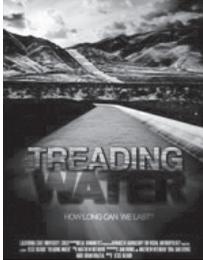
Gonzalez's "cradle-to-cradle" approach to food waste establishes waste diversion at a middle school using vermicomposting. The program has two goals: 1) measure reductions of food waste with associated production of vermicompost, and 2) increase our understanding of how students transfer and incorporate knowledge of waste diversion to and from their community.



BMU 314



BMU  
Auditorium



*Featured Film*  
**TREADING WATER**

FRIDAY  
3-3:50 PM

*page 7*



*Keynote Speaker*  
**DAYNA  
BAUMEISTER**

FRIDAY  
4-4:50 PM

*page 7*



BMU  
Auditorium

### ENVIRONMENTAL COALITION COMMUNITY GATHERING

**Location: C.A.R.D. Center, 545 Vallombrosa Avenue, Chico  
5:30-8:30 PM**

The Butte Environmental Council is cohosting the Environmental Coalition Community Gathering and a potluck to celebrate local environmental organizations. All from the local environmental community are encouraged to attend this free event. There will be free appetizers and adult beverages for sale. For more information, contact BEC staff at (530) 891-6424 or visit [becnet.org](http://becnet.org).

#### MORE SUSTAINABILITY FUN FACTS:

1. CSU, Chico submitted our first AASHE STARS report in November 2013 and received a Gold Rating for institutional sustainability efforts in Education & Research, Operations, and Planning & Engagement.
2. CSU, Chico is one of only eight schools nationally to be named to the Princeton Green Guide Honor Roll in 2013 and 2014.
3. CSU, Chico is one of 20 schools, and the only in California, to be named a finalist for Second Nature's 2014 Climate Leadership Awards.



## BREAKFAST AND WORKSHOPS

Cost: \$12

### CSU, CHICO UNIVERSITY FARM-RAISED BREAKFAST PREPARED BY CAMPUS CHEF ARIC SNOW

7:30–9 AM

All meats, eggs, fresh organic vegetables, and dairy products sourced from the University Farm or farms in our local community.

#### Menu:

- *Corned beef and root vegetable hash*
- *Chico country gravy and homemade buttermilk biscuits with a honey walnut whipped butter*
- *Sautéed kale and spinach frittata with heirloom tomato salsa and Pedrozo Farmstead cheese*
- *Mesquite grilled breakfast sausage*
- *Sparkling citrus punch (featuring an assortment of freshly juiced local citrus)*

## LOCAL FOOD SYSTEMS DISCUSSION

9–9:30 AM

Join emcees Dr. Jacob Brimlow, assistant professor, College of Agriculture, and Noelle Ferdon, local food systems director, Northern California Regional Land Trust, as they discuss the value of a robust local food system and hear faculty from CSU, Chico's College of Agriculture share their research supporting local food systems.



## FARM TOUR ROUND ROBIN

9:30 AM–12 PM

Visit five different stations around CSU, Chico's University Farm to learn about all of the unique projects that make it one of a kind. Stations include the Organic Vegetable Project, irrigation demonstration site, orchards, Sheep and Goat Unit, organic crop ground for forage, and an organic dairy program.

## WORKSHOP 1: LOW FLOW IRRIGATION SYSTEMS: OPTIONS AND MANAGEMENT

**Dr. Michael Spiess, College of Agriculture, CSU, Chico**

The workshop will show the merits low-flow systems such as drip and micro-sprinklers in various crops including how these systems are designed and managed for water conservation. Simple evaluation techniques and management techniques will be discussed.

## WORKSHOP 2: SUSTAINABLE MANAGEMENT ACTIVITIES AT THE CSU, CHICO ORGANIC VEGETABLE PROJECT

**Dr. Lee Altier, director of the Organic Vegetable Project, and Tina Candelo-Mize, Kyle Riddle, and Kelsey Lewis, CSU, Chico Organic Vegetable Project**

The Organic Vegetable Project provides a comprehensive program for education, production, and research. This tour of the project will feature a discussion about crop rotations, hedgerows, cover crops, vegetable varieties, and the new high tunnel.

## WORKSHOP 3: USING SMALL RUMINANTS TO CONTROL WEEDS

**Dr. Celina Phillips, supervisor of the Sheep and Goat Unit, College of Agriculture, CSU, Chico**

This is a discussion about small ruminants to control weed populations. Session will focus on practices currently implemented at the University Farm, as well as sharing what other producers are doing. Discussion will range from multi-species grazing, forage/browse selection of small ruminants, and examples of targeting grazing.

**WORKSHOP 4: SUSTAINABLE FEEDING STRATEGIES FOR BREWERY WASTE PRODUCTS**

**Dr. Kasey Deatley, lecturer within the College of Agriculture, CSU, Chico**

This session will focus on waste products generated as part of the beer-making process and their utility as a feed supplement in cattle diets. The session will focus on the research partnership between Sierra Nevada Brewing Co. and the CSU, Chico University Farm.

**WORKSHOP 5: BUILDING SOIL BIOLOGY AND SOIL ORGANIC MATTER WITH LIVESTOCK**

**Dr. Cynthia Daley, director of the Organic Dairy Program, CSU, Chico**

Come learn about managed intensive grazing and its impacts on soil organic matter. Emphasis will be on the continuum that healthy soils produce healthy plants, and healthy plants produce healthy livestock. Participants will discover first-hand how to assess a healthy pasture ecosystem by learning some of the basic signs.

**SATURDAY 12–3 PM**



**LOCAL BROWN BAG LUNCH,  
VINEYARD AND RANCH TOUR**  
**Cost: \$20 (wine tasting cost not included)**

**Bertagna  
Orchards &  
Vineyards**

Head just down the road to enjoy lunch and a tour at Bertagna Orchards and Son Kissed Vineyards. Lunch catered by Roots Catering (in the farm pavilion if raining)

Location: Bertagna Son Kissed  
Vineyards and Bertagna Orchards  
530-343-8014  
3329 Hegan Lane  
Chico, CA 95928

*Lunchtime Keynote Speaker*  
**BERTON BERTAGNA**  
*The Farmer, The Rancher, The Winemaker*

**BERTAGNA ORCHARDS AND SON  
KISSED VINEYARDS, AND BAJA VACA  
RANCH TOURS**



**Bertagna  
Orchards &  
Vineyards**

**1–3 PM**  
Tours will be led by Berton Bertagna, farmer/rancher/winemaker, and Toby Leonard, co-owner/rancher of Baja Vaca Ranch.

Two Groups:  
1) Vineyards and wine-making process and facilities  
2) Grassfed cattle pasture and almond orchards and processing facilities.

*Note: Bertagna Orchards and Vineyards has a tasting room that will be open after the conclusion of the event if you'd like to stay and taste some wine! Tasting fee is \$5 and you keep the glass.*

**SATURDAY 2–3 PM**



**GRUB CO-OP TOUR**  
**1525 Dayton Road**

**GRUB  
Cooperative**

Participants must get to the farm on their own and are encouraged to carpool or ride bikes.

The GRUB Cooperative is an intentional community that has been going strong for five years. There is an active farm, animals, children, bikes, people, and more. The tour will be of the land and they will share what it is like living so closely with a large group of people.

**GE PATHWAY MINOR IN  
SUSTAINABILITY STUDIES**

First rolled out in Fall 2012, the University's new Sustainability Pathway in GE culminates in a Minor in Sustainability and has become one of the most popular GE Pathway options. The Sustainability Pathway introduces the multiple dimensions surrounding environmental issues and needed skills to enter both the workforce and public life as a socially-responsible and environmentally-minded citizen.

Jim Pushnik, Pathway Coordinator and Conference Host <http://www.csuchico.edu/ge/pathways/sustainability/index.shtml>

CONFERENCE HOST



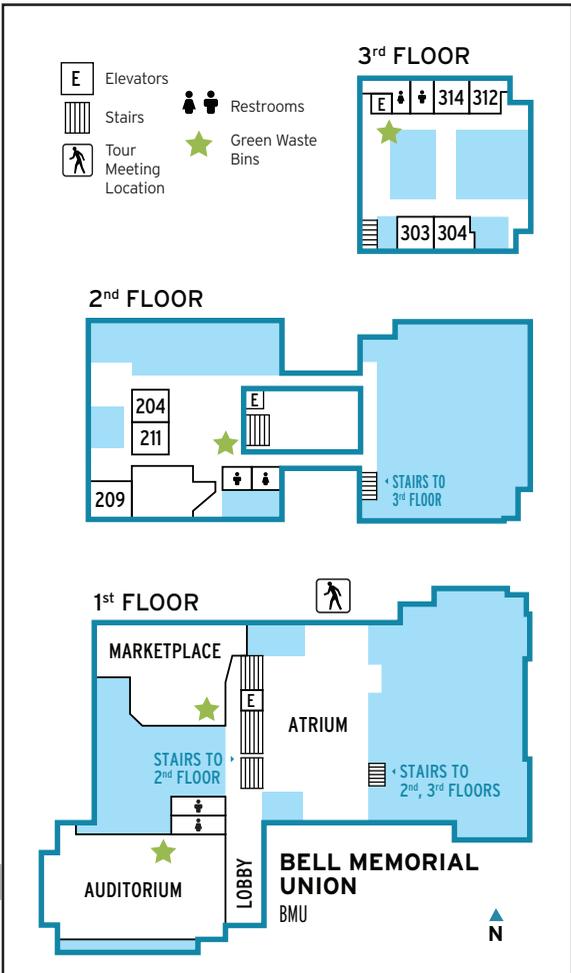
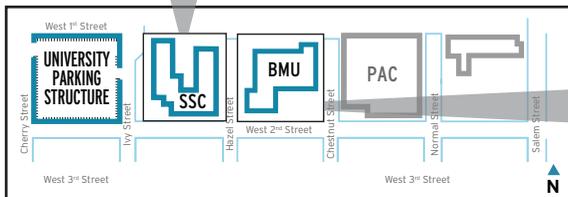
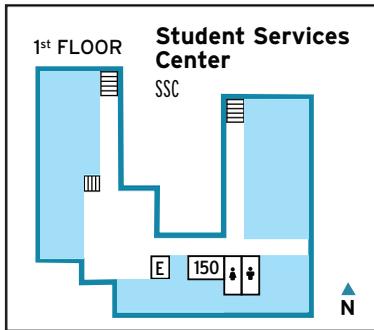
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Special rate conference parking is available at the University Parking Structure located at Second and Cherry Streets, third floor and “G” spaces only. Purchase a ticket at **only** the third floor dispenser using code **306** Thursday and Friday for a special conference rate of \$3 per day. Cash or coin payments must be exact. Visa and MasterCard are accepted. Please **do not** park in any stall marked Reserved. Parking lots are enforced from 7:30 AM–10 PM. Permits must be clearly displayed on the dash of your vehicle.

Additional parking is available in City of Chico lots adjacent to the University at the corner of Second and Salem Streets, and in the City of Chico Parking Structure at the corner of Fourth and Broadway Streets.

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California State University, Chico has adopted a policy of nondiscrimination and encourages all people to participate in our programs and activities. At University sponsored events, CSU, Chico will provide reasonable accommodations to members of the general public with disabilities unless doing so would create an undue hardship as described by law or cause a fundamental alteration of the program, activity, or service. Please contact 530-898-3333 with accommodation concerns in advance, or visit the registration table for further assistance. For more information, please visit our Accessibility Resource Center website at [www.csuchico.edu/arc/](http://www.csuchico.edu/arc/).

