THE WILD CAMPUS COMMUNITY, CLIMATE RESILIENCE AND ROLES FOR STUDENTS

Smart and Sustainable Campuses: Honoring Our Past, Charting Future:

Courtney Cochran and Julian Keniry, NWF, Monday, March 30, 2015
AGENDA: The Wild Campus Community

I. Introductions and Agenda Review
II. Popcorn: Define “Climate Resilience”
III. How Ecoleaders are Guiding the Way
IV. Presentation: Honoring Past, Charting Future
V. Small Group Experiments: Ecosystem Scale Project
VI. Closing
POPCORN: DEFINING CLIMATE RESILIENCE

Ideas from the group
NWF ON CLIMATE RESILIENCE

Assessing the Vulnerability of Key Habitats in New York
A Foundation for Climate Adaptation Planning

Natural Defenses from Hurricanes and Floods
Protecting America’s Communities and Ecosystems in an Era of Extreme Weather

Climate-Smart Conservation
Putting Adaptation Principles into Practice
LOOKING BACK, CHARTING FORWARD: NWF, Campus Ecology, EcoLeaders
BIODIVERSITY AND SUSTAINABILITY EDUCATION:

1. Ecosystem services
2. Ecological footprint
3. Solutions for Sustainability

Indiana University Press, 2010
U.S. HIGHER ED AND GRADUATES

- 19 million students annually, 4-5 million graduates
- More than 2x as likely to be “Influentials
- More receptive to environmental education, yet possess little difference in knowledge than average American

Source: Digest of Environmental Statistics, and Environmental Literacy in America, Roper, Kevin Coyle, NEETF, NWF, 2005, 2008, 2010
TRENDS IN CURRICULUM

- A minority of schools (24%) educate more than 50% of graduates about basic functions of earth’s natural systems

- Health Sciences (23%), Business (22%), Engineering (18%), Teacher Education (15%)
PERSISTING CHALLENGES: US LEADERSHIP PIPELINE:

1. Higher purpose?
2. Scale, geography, time?
3. Prescriptive vs Choices
4. Centralizing versus crowd-sourcing & connection
5. Campus culture

Britt Bollenbach, SUNY-Purchase, Recognized Ecoleader of the Month, August, 2014

www.NWFEEcoLeaders.org
ECOLEADER CERTIFICATION IN 5 STEPS

Step 1: Create Eco-Mission: Declare and Share a Higher Purpose

Step 2: Plan, Launch, Join Projects

Step 3: Connect with and Support Peers

Step 4: Earn Certification

Kyle Undag, Student Gov Officer, Regis College

WWW.NWFEcoLeaders.org
SKILLS, COMPETENCIES, REQUIREMENTS

- 25 out of 50 points (5 categories, 1 core)
- Core skill area: how to design, launch and contribute to projects, support others, encourage others, network, inquire, become informed, secure support from decision-makers and influential

Other skills and competencies:

- Innovation and Planning
- Implementation and Support
- Communications and Reporting
- Sustaining Culture Change

www.NWFECoLeaders.org
HIGHER PURPOSE: DECLARE & SHARE

“...My Eco-Mission is to help our community in many different aspects to become environmentally healthy and stable.

...This involves community service to help clean up the Atlanta area, recycling, planting trees, community gardens and promoting a healthy environment.”

Tia Dodd, Spelman College

Sources: Making Good, Dev Aujla and Billy Parish, Leader to Leader, & Personal Experience
DIVERSE SCALES: CAMPUS, COMMUNITY, NATIONAL, INTERNATIONAL

*Sustainable Brother Program, pilot of the Alpha Phi Omega National Service Fraternity

*Brothers accumulate “action” points for sustainability actions and education.

Nishant Makhijani,
University of Illinois Urbana-Champaign
CONTINUOUS IMPROVEMENT: ECODEMIA, ISO 14001

Vision: curriculum, management, operations, community, policy

Celebration

Goals, guidelines, plans

Structure, sharing

Professional development, orientation
HOW CAMPUSES ARE LEADING
Coastal restoration that bolsters natural infrastructure

UCSB student, Jenna Driscoll, and Lisa Stratton, Director of Ecosystem Management, Cheadle Center for Biodiversity and Ecological Restoration
Trees as a strategy for campus greenhouse gas reduction.

Warren Wilson College students conducting campus tree inventory
GEORGIA SOUTHERN UNIVERSITY

Stormwater mitigation efforts on campus to keep waterways healthy

Native vegetation in the bioswale at Georgia Southern University.
Photo: Lissa Legge
A National Wildlife Federation Report:

The Campus Wild
How College and University Green Landscapes Provide Havens for Wildlife and “Lands-on” Experiences for Students

This richly detailed guide highlights how colleges and universities are playing a dynamic role in protecting wildlife and restoring habitats in campus green spaces — including on-campus landscapes and natural areas, as well as on distant campus-owned lands. It explores how such green places — dedicated to “The Wild” — also can benefit students, faculty and staff with leadership opportunities, hands-on learning, energy savings, water conservation and much more.

“Providing places for wildlife in our communities—whether at home, schools, businesses or at nearby parks... There is no more rewarding way to stay connected to nature right outside your door.”

- David Mizejewski
Naturalist, National Wildlife Federation
NWF RESOURCES

- NWF Climate Smart Conservation Reports Online
- NWF Campus Sustainability Case Study Database
- Ecodemia: Campus Environmental Stewardship (20th Anniversary!)

Ecodemia: Campus Environmental Stewardship

Over time, dozens of grasses with such names as big and little bluestem, Indian grass and buffalo grass (all warm season grasses, going dormant with the first frost and turning green again in May) evolved with roots as deep as 15 feet. They withstood thousands of years of drought but succumbed in short order to sods, whose specially designed plows cut easily through long, sturdy roots. The soil below the tallgrass prairie of much of Nebraska was especially rich in nutrients and retained moisture better than the sandy, shortgrass prairie in the northwestern part of the state, which gave way mostly to ranching. Prairie soils are also virtually free of rocks. “There was an old saying,” recounts Hansen, “that they could put a plow down at the Missouri River, go west, and not hit a tree root or a rock for 500 miles.” Now that agriculture ranks as the primary source of income in the state, the tall grasslands have dwindled down to inadvertently preserved parcels.

The Native Advantage

As part of her undergraduate program in horticulture at the University of Nebraska in the late 1970s, Hansen studied with faculty who were researching the appropriateness of buffalo and other native grasses for use in lawns. They compared the maintenance needs of the cool-season grasses favored by local institutions and homeowners with the requirements of warm-season native grasses. Their findings drove home the point, says Hansen, that “cool-season grasses like fescue and bluegrass need a lot of input; we need to add water, fertilizer, pesticides, and so forth, to keep them green like they are supposed to look.” In her landscape design courses she also became familiar with native perennials and learned how to propagate native grass seeds. Incorporating these plants, she began to create more natural, less resource-intensive landscapes, starting with her own one-acre yard.

Replanting a Campus

After a two-year stint with the grounds department at her alma mater, Hansen was hired as grounds manager by Nebraska Wesleyan. This position has offered her the creative space in which to experiment further with native grasses and perennials. She has collected seeds from surviving prairie patches and grown many of the grasses herself—using them, along with wildflowers and native plants, whenever possible. “Obviously, I couldn’t come in and just tear out what was there and start over,” laughs Hansen. The best time to replant, she finds, is after construction or when the landscape has been
GROUP EXPERIMENT: DESIGNING ECOSYSTEM SCALE PROJECT

CHESAPEAKE BAY WATERSHED

Credit: NASA Landsatt Image

LONG LEAF PINE ECOSYSTEM
GROUP EXPERIMENT: ECOSYSTEM SCALE PROJECT

1. Group by Watershed (or Ecosystem)
2. Map campus communities in the watershed
3. Draft, Discuss and Share Individual Plans
4. Present Highlights

- What’s the goal?
- Key groups involved?
- Top 1-3 actions?
- Technologies employed
CERTIFIED “SSCC” ECOLEADERS?

• Go to: www.nwfecoleaders.org
• Tag Eco-Mission and Profile “SSCC2015”
• Raffle closes Earth Day! Wednesday, April 22, 2015
THANK YOU!
For More Information Please Contact

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