Committee on Diversity and Education:  
Strategic Plan 2016-2018

Nalini Nadkarni, VP for Education and Diversity  
Teresa Mourad, Director, Education and Diversity Programs  
Brenda Bergman, Michigan Tech University  
Kim Bjorgo-Thorne, West Virginia Wesleyan College  
Carmen Cid, Eastern Connecticut State University  
Ken Klemow, Wilkes University  
Aurora MacRae-Crerar, PhD Candidate, University of Pennsylvania  
George Middendorf, Howard University  
Bob Pohlad, Ferrum College  
Josh Scholl, PhD Candidate, University of Arizona  
Carolyn Thomas, Ferrum College

The need to promote education and diversity in ecology is enormous, drawing from a wealth of approaches, programs, and projects. However, the Committee for Diversity and Education (CDE) must make strategic choices on allocating its limited resources. During the 2015 CDE Planning Retreat (October 23-24, 2015), Committee members created a Strategic Plan to guide the current and future members of our group to: a) examine and potentially revise our mission statement; b) articulate our goals and objectives; and c) generate strategies and actions that will help meet our mission. This is a dynamic document; we anticipate that this strategic plan will be formally re-examined in three years. Each year, we will align our Action Plan to ensure it is in alignment with the Strategic Plan.

I. CDE Mission Statement:  
Fostering collaboration, promoting diversity, and advancing education.

II. Priority Goals for CDE

A. Enhance public awareness of and engagement with ecology  
B. Disseminate best practices in ecology to attract a continuing supply of new ecologists  
C. Diversify ESA membership, the population of ecologists, and the range of publics whom we reach  
D. Shape the CDE as a hub to coordinate and amplify impacts of events and initiatives.  
E. Measure and understand the efficacy and extent of the impacts of CDE activities to create improved programs and best use resources into the future.
GOAL A. Enhance public awareness of and engagement with ecology

Objective 1. Strengthen ecological knowledge and awareness amongst diverse audiences (e.g., accurate understanding of modern fundamental ecological concepts; how ecology is a science that follows scientific rules; and how ecological knowledge is based on evidence).

- **Strategy a:** Scale “up and out” to public groups
  - i. **Action item:** Enhance ecological professional development of K-G educators (train the ‘trainers’)
  - ii. **Action item:** Promote Bio-blitzes
  - iii. **Action item:** Connect with the Citizen Science Association and link to their website (http://staging.citizenscience.org/).

- **Strategy b:** Enhance understanding of career paths to and within ecology
  - i. **Action item:** Develop a blog about “my path to becoming an ecologist”
  - ii. **Action item:** Increase exposure to alternative careers, e.g., through the Frontiers career pathways series
  - iii. Enlist the Student Section to promote related activities

- **Strategy c:** Disseminate / develop information that shows examples of how ecological science is conducted and used for generating knowledge and informing decision making
  - i. **Action Item:** Work with ESA Public Affairs Office to identify and post existing articles to the CDE website that show examples of how ecological science is conducted and used in decision making
  - ii. **Action Item:** Identify conceptual gaps and develop new articles
  - iii. **Action Item:** Establish engaged, working relationships with individuals and organizations that will facilitate information exchange about how ecologists inform decision-making with at least five organizations

GOAL B. Disseminate best practices in ecology education to attract a continuing supply of new ecologists

Objective 1. Support early career ecologists in teaching ecology

- **Strategy a:** Explore the demand, feasibility, and resources needed (market research) including the possibility of a certification program
  - i. **Action Item:** Initiate relationships with those knowledgeable about market research
  - ii. **Action item:** Identify the most effective approach for achieving this objective
iii. **Action item:** Explore applying for a grant through the NSF business program I-CORPS

iv. **Action item:** Collaborate with the Student Section to help meet their objectives, e.g., use the Student Section listserv to explore what students need to be competitive for non-academic positions

Objective 2. Make available ecology research, content, and pedagogy to improve teaching of ecology in an organized and effective way

- **Strategy a:** Define and make available key or core concepts in ecology
  - i. **Action item:** Develop a set of core concepts that undergraduate students should understand at introductory ecology levels for approval by the ESA Governing Board.
  - ii. **Action item:** Adapt the set of core concepts for precollege and other college audiences (e.g. intro biology).
  - iii. **Action item:** Develop an engagement plan to promote adoption of the core concepts in ecology.

- **Strategy b:** Make education resources more visible on the ESA website
  - i. **Action item:** Identify and screen education resources (including resources on pedagogy).
  - ii. **Action item:** Support, promote and expand peer-reviewed EcoEd Digital Library holdings
  - iii. **Action item:** Increase visibility of education resources on the home page of ESA

- **Strategy c:** Improve access to key and emerging concepts that appear in ecological literature
  - i. **Action Item:** Review ways to incorporate existing efforts by the Public Affairs Office in education activities and programs
  - ii. **Action Item:** Translate primary literature into more compelling formats (videos, podcasts, social media)
  - iii. **Action Item:** Generate new videos through a competition on innovative pedagogy for educating diverse students

*Objective 3. Promote science of teaching among ESA members*

- **Strategy a:** Expand participation at the REEFS faculty workshops at ESA meetings by 10%
- **Strategy b:** Expand participation in Life Discovery Education conference by 20% in three years
GOAL C. Diversify ESA membership and the population of ecologists

Objective 1. Diversify membership

- **Strategy a:** Identify incentives that will increase the diversity of ESA members over the next 10 years.
  1. **Action Item:** Implement a survey of current and past ESA members to determine what constitutes diversity with respect to ecology and what constitutes appropriate goals with regard to increasing diversity.
  2. **Action Item:** Through existing contacts, conduct a survey to find out what benefits / incentives diverse ecologists need to become members of ESA.

- **Strategy b:** Identify resources that will engage members throughout the year and thereby show benefit to membership.
  1. **Action Item:** Prepare interactive career resources and disseminate online
  2. **Action Item:** Host online career fairs or webinars

- **Strategy c:** Enhance participation of local students and their families at annual meetings
  1. **Action Item:** Identify local host in spring before annual meeting to help identify several high schools with whom we can get in contact to offer free ESA passes for the annual conference.
  2. **Action Item:** Offer free day passes for local, diverse high school students and their families
  3. **Action Item:** Provide mentors for the high school students to help them navigate the conference and enhance their experience
  4. **Action Item:** Create posters describing the “daily lives” of ecologists

- **Strategy e:** Support graduate students and the next generation of ecologists
  1. **Action Item:** Contact young professionals who are in ‘early careers’ programs (e.g. USFS, National Laboratories, NOAA, National Fisheries Service) and determine how we can help prepare the next generation for their careers
  2. **Action Item:** Collaborate with the Student Section and ESA membership staff to create web pages for the dissemination of job Survey/Features and other career resources (e.g., links to job search engines)

Objective 3. Track and understand the career decisions of minority ecologists
o **Strategy a:** Learn from the SEEDS program participants, and specifically SEEDS alumni, to explore the career pathways of minority students
  i. **Action Item:** Conduct surveys of SEEDS alumni

**GOAL D. Shape CDE as a hub to coordinate and amplify impacts of events and initiatives**

**Objective 1. Validate and promote existing education and engagement activities**

o **Strategy a:** Give the CDE a tangible web presence within ESA
  i. **Action Item:** Add CDE webpage to existing education website as portal to resources
  ii. **Action Item:** Explore how ecologists can connect with and engage diverse communities via a trusted messenger and local ecologists through the leadership and efforts of relevant ESA sections.

**Objective 2. Enhance communications and collaboration among ESA sections and chapters to inform ESA members of diversity outreach and education activities.**

o **Strategy a:** Increase communication between CDE, section and chapter chairs
  i. **Action Item:** Create a list-serve that includes only the section chairs and vice chairs and/or one representative from the section

o **Strategy b:** Coordinate efforts with sections and chapters that reach diverse populations
  i. **Action Item:** Identify all ESA sections and chapters that reach diverse populations (e.g., Environmental Justice, Traditional Ecological Knowledge, International Association of Black Ecologists)
  ii. **Action Item:** Gain a better understanding of the mission of these sections
  iii. **Action Item:** Identify gaps and collaborative opportunities in outreach activities
  iv. **Action Item:** Explore how ecologists can connect with and engage diverse communities via a trusted messenger and local ecologists through the leadership and efforts of relevant ESA sections.

o **Strategy c:** Inform ESA members about the activities of sections and chapters in their efforts to engage diverse publics and enhance ecology education
  i. **Action Item:** Organize a diversity-focused Ignite session for ESA 2016 (and annually?) in which the sections and chapters are invited to share their diversity-outreach activities as well as showcase section and chapter collaborations.
GOAL E. Measure and understand the efficacy and extent of the impacts of CDE activities to create improved programs and best use resources into the future.

Objective 1. Create and implement assessment tools that can be implemented for particular CDE initiatives and the overall CDE goals

- **Strategy a.** Inventory existing assessment data on past and present CDE initiatives
- **Strategy b.** Communicate with other entities within and outside of ESA to accumulate useful assessment instruments
- **Strategy c.** Engage education partners to help create needed assessment and evaluation tools.
- **Strategy d.** Collect and examine assessment results on an annual basis and draw from these results ideas for improvements.