

Bren School of Environmental Science and Management
Commencement Address
Santa Barbara, CA
June 2006

Good afternoon and congratulations! I remember, in the early 1990s, meeting with UC Santa Barbara faculty when the School of Environmental Science and Management, now the Bren School, was a glimmer in their imagination. The planning team had an idea, a commitment, and a formative plan. Now we are gathered to honor Bren School graduates, the 9th graduating class of the school that resulted from that vision laid out over a decade ago.

I have the great good fortune in my job to experience the rich textures and treasures of America's landscapes. I've seen the geologic rainbows of Moab, Utah, learning from park archaeologists of their history and composition. In Hawaii, I've held a wee, red honeycreeper in my hand—a tiny bird that lives in the Koa forests of the Big Island. I've stood in the Yukon River in Alaska weighing and measuring spectacular salmon. I've canoed in the Cache River in Arkansas with biologists in search of the elusive—but we hope still extant—ivory-billed woodpecker.

Some months ago, I perused a book on the ivory-billed woodpecker. The book cited a Cuban biologist who wrote: “The ivory-billed woodpecker lives between science and magic.”

The magic is, of course, the wonder the bird evokes in us with its magnificence and mystery. But it is science, management, and on-the-ground conservation that will determine whether this great bird will survive through this 21st century.

Twenty-first century conservation success requires new thinking, new skills, and broadened horizons in environmental science and management. There is a passage in *Alice in Wonderland* in which Alice asks the Cheshire cat: “Tell me, please, which way ought I to go from here?” The cat grins and replies: “That depends a good deal on where you want to get to.”

Each of you will trace your own trajectory into the future—your own goals. But your paths will unfold within a shared context. If I look into my crystal ball for the 21st century, I see several trends and influences shaping workplaces and communities.

I see an accelerating trend toward networks, points of confluence, integration, and cross-boundary coordination. This trend invokes the imperative of teams, virtual organizations, collaboration and partnerships. Conservation success will require partnerships like those that coalesced yesterday in the announcement of the NW Hawaiian Islands National Marine Monument, creating the largest marine protected area in the entire world.

The evolution toward networks is not serendipitous. Consider the current conservation context. That context is one of connectedness. There is a connectedness of the problem sets we face. Nature itself knows no jurisdictional boundaries. And, the world around us is a complex blend of biological, hydrological, and geological structures, processes, and organisms. These interconnections suggest an imperative of exploring interrelationships and linkages among professional disciplines—a reconnecting of professional disciplines that grew ever-more distinct and fractionated in the 20th century.

Yet establishing these interconnections presents the challenges of what author Michael Schrage in his book *Serious Play* calls the problem of “shared knowledge.” How might we communicate effectively across specialized disciplines—engineering, biology, economics, management—each with its own language and culture? How, too, as we develop these linkages, can we maintain the rich knowledge that comes from specialization while assuring interdisciplinary problem solving?

In environmental problem solving, so many “knowledges” are relevant, yet they seldom reside all in one place or organization. This knowledge dispersal underscores the imperative of partnering to access knowledge.

The context in which we operate is one of interconnections among environmental problems and interconnections among relevant knowledge. So, too, is there the simple reality of people interfacing with place. Many different people have ties to the same landscapes.

All these trends are heightening the impulse for collaboration, cross-jurisdictional, and cross-discipline coordination. These trends are heightening the centrality of relationship management and heightening the significance of strategic thinking, external awareness, and creativity in organizational forms. These qualities are not new, but their relevance to the modern workplace is deepening.

So, what does the 21st century workplace look like? I must be an interdisciplinary workforce. It must be a workforce that blends professions. We need bioengineering to tap “Nature’s Capital” such as wetlands to purify wastewater or permeable parking lots to prevent stormwater runoff, enhancing environmental performance in our built environments. We need bio-business management to foster “green building” design and management. The Bren School is already a pioneer in this viridian verge of environment, architecture, and management.

The workplace must be an interdisciplinary workforce. It must also be a mediating workforce populated with facilitators and negotiators.

It must be a team-building workforce and a results-focused workforce.

Bren graduates are poised to meet these challenges through the integration of professional disciplines and schooling in the foundations of basic management.

Yet beyond professional disciplines and training also lie the intangibles of excellence. I thought I'd share with you today my personal compass for the leadership roles that I have held. This compass gives me a framework for thinking about the characteristics of successful action. Join me for a moment in circumnavigating the points on this compass.

The first point on my compass is the old adage: "no man—or woman—is an island." We achieve goals better by working with others.

Consider conservation and join me on a virtual journey to the Duck Trap River in Maine. The river is one of 8 rivers still hosting Atlantic salmon. Its stream banks are eroded; abandoned gravel pits dot adjacent lands. Its shores lack native grasses and shrubs.

Yet folks are now laying a caring hand to this landscape. Over two dozen partnering groups—farmers, conservation organizations, outdoor recreation clubs, towns, federal agencies, and others are planting native grasses and transforming gravel pits into vernal pools. These partners are restoring miles of river and habitat.

The Duck Trap River Tale and other ventures in cooperative conservation illuminate a second point on my compass. The tale illuminates the importance of what Nobel laureate economist F.A. Hayek calls experiential knowledge—the knowledge of time, place and circumstance, whether on the ground, in a factory, or within a community.

Poet Wallace Stevens once wrote that: "Perhaps real truth depends upon a walk around the lake." His poetry offers both literal and metaphoric insights. We sometimes forget the importance of experiential knowledge that helps define the doable and pinpoint the possible.

Using this insight, our Fish and Wildlife Service in Alaska worked with a fishing community to come up with new practices that would avoid any possible harm to albatross, the wandering bird of the sea. Biologists had documented a decline in albatross, a decline caused, in part, by fishing practices that snared the albatross as they dove for food. A traditional response would have been to shut down the fishing to protect the bird. Instead, the Fish and Wildlife Service managers approached the fishing community, outlining the problem. The fishermen came up with new practices that would avoid any harm to albatross. Thus, we have a conservation tale in which success resided in combining science with on-the-ground practical knowledge to solve a problem.

I come now to the third point on my compass. Greek philosopher Heraclitus once wrote: "All is flux; nothing stays still." This observation has multiple implications—for managers and policy makers. We can neither know nor prescribe the future, whether as a consequence of the butterfly effect of unpredictability described in chaos theory or because of the inevitable fickleness of human action.

The omnipresence of change makes nimbleness a virtue and underscores the imperative of "feedback loops" in organization design and management. It also underscores the

imperative of resilience. How might we plan for unknown or imprecise risk in a context of constantly changing circumstances?

A dose of personal resilience helps, too. I was in Arizona visiting a ranching conservation effort a year ago. As I was ushered into my sleeping quarters, my hosts casually commented: “We found a rattlesnake in the drawer last week in the room where you stayed last year. But,” they continued, “don’t worry. We hardly ever have rattlesnakes in this particular bedroom.”

Let me step back from my compass for a moment and reflect on the context of policy and management. Both are fundamentally about people and ideas. Both center on how to frame problems and ways to address them and how to motivate folks to join within that framework to act together for results.

The Tale of the Duck Trap River presents an interface of people and place; it presents and intersection of ideas and action. The efforts along the river are built on a foundation of communication and dialogue to achieve conservation goals through partnerships.

Working as I do, in the world of Washington, D.C.—a world of policy and politics—I am especially interested in how to achieve conversation with a center, not sides. That interest brings me to the remaining points of my compass.

The first of these final points is that civility is, perhaps, the greatest civic virtue. The corollary to civility is the elemental importance of the ability to listen. Author William Isaacs, in his book *Dialogue*, observes that “to listen is to develop an inner silence”—a simple statement—but profound.

Conversation, in the workplace and in communities, also requires a deep belief that each and everyone is important. Everyone has something to offer. Excellence resides in matters both big and small. Don’t be afraid to tell your colleagues: “Wow, you did a great job!” As leaders of the future, part of your path to success is in helping others be the best they can be.

It has been a great privilege for me to experience the Interior Department these past few years. People often ask me: “What has been the greatest surprise for you?” I don’t know if I am entirely surprised by the workforce, but surely my greatest inspiration has been the caliber of people at the Department. Their work—in parks, refuges, science labs, offices, and fields—touches the lives of each and every American.

All of you are now poised to touch America—and the world. Success in any endeavor, it seems to me, centers on seizing the day. It centers on doing something you love. If you love your work, you’ll never work a day in your life.