

# The Oldest Tradition

Humanity's oldest tradition is strong at the Prescott College Natural History Institute

By Tom Fleischner, Ph.D.

A dozen students lean into the steep hillside above the snout of an enormous valley glacier. For the moment, though, they pay no heed to the massive muscle of ice—their attention is focused on the enchanting structures within tubular corollas of the arctic-alpine flowers at their feet. The world suddenly takes on new depth and beauty as these details emerge in tiny, significant patterns. The Pleistocene feel of the immense northern landscape adds new dimension and meaning.

area at Prescott College, engage in the practice of natural history throughout their coursework. While there are many definitions—some narrower, some broader—of natural history, the common denominator is a focus on observation and description. I prefer the more expansive definition: “a practice of intentional, focused attentiveness to the more-than-human world, guided by honesty and accuracy.” Simply put, natural history is the practice of paying attention.

stunning prints by Audubon, Catesby, and many others in our new Josephine Michell Arader Collection (see page 14) representing, in a unified whole, the best art and the best science of the day.

Before World War II natural history was seen to be the core of a liberal arts education. At that time, a standard part of teacher training in most states was a course called “Nature Study,” based on curriculum developed at Cornell. But the onset of the Cold War, the space race, and advances in genetics pushed aside attention to the world that is visible all around us, focusing research into what was beyond our sight—inside of cells and beyond our atmosphere.

In academia, natural history came to be seen as antiquated and irrelevant to the modern world. It has been increasingly marginalized during the last three or four decades, as numerous colleges and universities replaced natural history-oriented faculty with molecular biologists who could bring in major government grants. This led to what many people consider a crisis in higher education—the

portance of revitalizing natural history and restoring it to its rightful place at the center of natural science, education, and healthy culture. Among the five founding board members were Dr. Josh Tewksbury '92 and myself. Soon thereafter, Arya Degenhardt '98 joined the board, followed more recently by College Trustee Dan Campbell. Elizabeth Worcester '09, then a student, created the organization's first website, and Dr. Gary Paul Nabhan '73 and longtime faculty member Dr. Ed Grumbine, serve on the NHN Advisory Council.

The Network's momentum led to some exciting leaps forward. We organized an interactive symposium titled A Renaissance of Natural History in Human Ecology at the annual conference of the Society for Human Ecology in 2008. The following year Josh Tewksbury led a session titled Natural History: The Basis for Ecological Understanding and a Global Sustainable Society at the annual conference of the Ecological Society of America (ESA). The Ecological Society meeting is the largest gathering of professional



In an open *panga* in the Gulf of California students gasp with wonder as a whale larger than the boat gracefully curls underneath it. Which species is it?! Instantly, students and teacher search for field marks: size and shape of dorsal fin, length of pectoral flippers, color, markings on the head ...

Art students carefully observe bones laid out before them, shading contours with pencils on paper, rendering three dimensions onto a flat surface. Photographers explore and document the wild world around them, merging technical skill with artistic imagination, guided by careful field observation. Writing students hike up canyons, unveiling narrative threads for essays, poems, and stories.

Psychology students discover that attentiveness to the world beyond human psyche illuminates their understanding of human emotions. Student educators lead sixth-graders through ponderosa pine forests, showing the children how the number and length of needles can help them distinguish several species of pine trees, and pines from firs. The children's hometown becomes more intricately beautiful; they learn that the world has more stories to tell than they ever realized, and that *their* place is special.

Adventure education students—whether rafting through the Grand Canyon or climbing vertical granite—find that an understanding of landscape undergirds the human experience of wild lands, that the understanding of place precedes the understanding of self-in-place.

These students, and hundreds more, representing every academic

While natural history inquiry can yield impressive bodies of knowledge and storehouses of artifacts, at its heart it is a *practice*—a verb, not a noun. I've come to describe it as the practice of falling in love with the natural world. So often when we open our eyes more widely, and tune our other senses into sharper attentiveness, we find delight and beauty that can sustain us. Natural history, in my experience, is an inherently uplifting, hopeful endeavor.

Natural history is the oldest continuous human tradition. There have never been people in the world without its practice. For most of the history of our species human survival literally depended on attentiveness to the surrounding environment with eyes, ears, heart, and hands. The term natural history actually dates back to the first encyclopedia, which was called *Historia Naturalis*—literally, “the story of nature”—a multi-volume compendium of everything known about the world, compiled by Pliny the Elder in the decades following the birth and death of Christ. From the outset, then, natural history was broad-based and interdisciplinary.

As centuries passed, the realm of natural history narrowed and focused on the more strictly scientific form of inquiry, forming the empirical basis for biological and ecological sciences, for geology, and for cultural anthropology. Darwin's astute observations in the Galápagos, and Wallace's in Malaysia—exemplary natural history—led to the most essential, and revolutionary, insights of modern biology. But at its best there is no clear boundary between the scientific, artistic, and literary components of natural history. Consider the

loss of natural history training. A dozen years ago two of the most respected biologists in the United States wrote an urgent plea in the *Chronicle of Higher Education* about the importance of maintaining natural history's place at the center of the liberal arts, but it remained unheeded by most institutions.

Throughout these cultural shifts, no other educational institution has been more steadfast in its commitment and dedication to natural history than Prescott College. Natural history has been part of the teaching and learning every single day of this College's history. Today, by rough estimate, more than a third of PC faculty are naturalists of one sort or another. It's doubtful whether any other college comes close to a percentage that high. And a list of distinguished natural history alumni would run to many pages.

People affiliated with Prescott College—faculty, alumni, current students, staff, and Board members—have been at the center of a new national movement to revitalize natural history. And so Prescott College is now getting recognized for what it has been doing exceedingly well all along. Highly regarded government biologists, for example, have publicly proclaimed that Prescott College graduates are some of the only people they can find for field staff—competent individuals who know how to live in the field, how to identify flora and fauna, and how to think critically. All skills fostered by the practice of natural history, and by Prescott College.

A separate NGO, the Natural History Network (NHN) was founded in 2006, to facilitate a national conversation about the im-

ecologists in the world, and this session was the buzz of the conference—standing room only. Three of the speakers were affiliated with Prescott College; another was the president of the host university, who, in his address on the lamentable demise of natural history in academia, singled out Prescott College as “one of the only places getting it right.”

Among the people standing in that room was a staff officer for the National Science Foundation, who felt this work was critical, and encouraged the submission of a proposal. A few months later, Josh Tewksbury, Dr. Kirsten Rowell '96, and I wrote and received an NSF grant for “The Natural History Initiative: From Decline to Rebirth.” This collaborative grant to Prescott College and the University of Washington, where Josh was Walker Professor of Natural History and Kirsten a Research Associate, provided for convening four high-level gatherings of naturalists over a six-month period in 2011. (Kirsten is now acting assistant professor in Biology and Curator at the Burke Museum of Natural History and Culture, and Josh is Director of the World Wildlife Fund-International's new Luc Hoffmann Institute in Switzerland.)

Each session of the Natural History Initiative gatherings focused on a particular aspect of natural history's role: society, education, research, and management. Participants included people whose names you read in textbooks, as well as less known practitioners of natural history. Poets and painters, biologists and psychologists, teachers and land managers engaged in animated discussion—on everything from

the relationship of emotional and rational ways of interacting with the world, to technical research issues, to natural history in the digital age. A social movement had erupted. At one of the sessions, nine of the 25 participants were affiliated with Prescott College. These sessions and the follow-up symposium at another ESA conference affirmed the notion that we are really doing something right here (the organization now has a formal Natural History Section)—and that Prescott College is at the center of this important movement.

In the spring of 2011, seven Prescott College students and I joined with peers from our sister school, College of the Atlantic, to present “Teaching and Learning Natural History in the Field,” a special session at the Society for Human Ecology conference. One of the conference’s keynote speakers commented that the student presentations were among the most hopeful things she’d witnessed in a very long time. Meanwhile, a multi-media exhibit, “The Natural Histories Project” ([naturalhistoriesproject.org](http://naturalhistoriesproject.org)), which grew out of recorded conversations during the From Decline to Rebirth sessions, was featured at a second ESA conference, and is currently being developed into a traveling exhibition.

It only seemed natural that the institution central to the practice and renaissance of natural history in higher education establish a center of excellence to serve as a local and national resource on the subject. This past summer, after two years of planning, the College founded the Natural History Institute. I have the honor of serving as its first director. The Institute’s mission is to provide “leadership and resources for a revitalized practice of natural history, integrating sciences, arts, and humanities, within Prescott College and throughout



North America.” This will be accomplished by creating a natural history lab for Prescott College classes from across the curriculum; providing space and resources for student and faculty research; offering public programs, including exhibitions, lectures, and field experiences; by archiving and documenting landscape change in the bi-national Southwest (slide collections, significant field notes, etc.); and by archiving digital and physical collections of biological and cultural resources of the Arizona Central Highlands and adjacent ecoregions.

A singular feature of the Prescott College Natural History Institute is explicit integration of art, science, and humanities—a true liberal arts approach to natural history, harkening back to the interdisciplinary roots and history of the field. Rather than aiming at a narrow or superficial subset of biological science, the Institute will demonstrate that natural history is larger than science alone. Original Audubon prints will hang next to Seri baskets, in a room where literary naturalists give readings, around the corner from scientific collections of biological diversity.

It is remarkable what Prescott College has accomplished in the realm of natural history in spite of a distinct dearth of physical resources. The new Institute, infused with the thrust of the Arader art collection, will propel the College into an extraordinary new phase of leadership in natural history education, research, and outreach.

*Tom Fleischner, Director of the Natural History Institute, has taught natural history and conservation biology at Prescott College for 25 years; he is also the founding President of the Natural History Network ([naturalhistorynetwork.org](http://naturalhistorynetwork.org)). If you are interested in learning more about the Natural History Institute or if you would like to make a donation to support its programming, visit <http://www.naturalhistoryinstitute.org> or <https://www.facebook.com/NaturalHistoryInstitute?fref=ts> for info and <http://naturalhistory.kintera.org> to donate, or contact Tom at [naturalhistory@prescott.edu](mailto:naturalhistory@prescott.edu).*

**NATURAL HISTORY INSTITUTE**  
INTEGRATING ART, SCIENCE, AND HUMANITIES

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