

Connective Tissue

Finding hope where facts and values intersect

BY LEE SHERMAN



Environmental philosopher Michael P. Nelson gamely copes with “ginormous” mosquitoes and gobs of “moose grease” as he necropsies a moose on Isle Royale in Lake Superior. (Photo: John A. Vucetich)

When Michael P. Nelson talks about his work, he mentions carcasses and cadavers to a startling degree — startling because Nelson is not a physician or a veterinarian or even a biologist. He’s a philosopher. So at first glance, necropsy seems an odd topic of discourse. But it starts to make sense when you notice that Nelson’s office is in Oregon State’s College of Forestry, not the College

of Liberal Arts where universities typically house their philosophers. And, as the only philosopher ever hired to lead one of the National Science Foundation’s 27 Long-Term Ecological Research (LTER) sites — in this case, OSU’s H.J. Andrews Experimental Forest — Nelson again defies tradition.

“We started the search assuming we’d end up with some sort of ecologist, hydrologist or biophysical

scientist,” recounts John Bliss, the associate dean of forestry who led the hiring process. “I knew we’d turned a corner when the ecologists on the committee stopped me in the hall to say things like, ‘Maybe a philosopher is what we need!’”

With -ologists already well represented, they opted instead for Nelson’s novel viewpoint. “Michael brings a philosopher’s logic to complex problems, unencumbered by disciplinary straitjackets,” Bliss says.

Mind Over Matter

To understand these discrepancies, you have to go back to Nelson’s hometown of Janesville, Wisconsin, where, in a high school anatomy class, he saw a dead body laid out on a steel slab. “I thought that cadaver was the coolest thing in the world,” he recalls. But once he got to college, the study of biology struck him as tedious. Too many equations to solve, too many chemical reactions to memorize. In contrast, he found himself relishing his philosophy classes. Ideas like the moral imperative and the inherent nature of being quickened his imagination. He soon switched majors and began to ponder the world on a cerebral rather than cellular level.

His fascination with biological systems, however, never went away. Eventually, this man whose mental petri dish was awash in syllogisms

instead of cell divisions circled back to where he started — to that raw, physical nexus of life and death that is a carcass. It happened about a decade after he earned his Ph.D. at England's Lancaster University, the cradle of environmental philosophy. By then, Nelson was teaching at Michigan State University, where he met John A. Vucetich, co-director of a long-term, multidisciplinary study of predator-prey dynamics. Vucetich invited Nelson to visit the study site: a wild, isolated, mist-wrapped island in Lake Superior. Nelson was enchanted. Soon he became the "resident philosopher" for his project, the Wolves and Moose of Isle Royale.

Which is how, in 2005, he came to be kneeling beside a pile of bones and sinews where wolves had devoured a moose. Every summer, Nelson participates in collecting biological samples, including scat and skulls, for DNA analysis and pathology studies. Now in its 55th year, the project has tracked the dynamics between wolves and moose over a timespan unprecedented in the annals of predator-prey studies. Surprising insights into island biogeography and wildlife management are emerging from the mists.

"What I really like about my work," Nelson notes, "is that it exists at the edges of disciplines."

Sting Like a Bee

In front of a crowd, Nelson moves nimbly, like a boxer, on the balls of his feet. An aura of great energy emanates from his face and hands.

It's clear that he's in a hurry to push his thoughts outward. Planet Earth is, after all, poised on the cliff of calamity, he says during a joint presentation on ethics and climate change with OSU conservation philosopher Kathleen Dean Moore. He and Moore challenge the scientists in the audience to couple their facts (climate models, data sets, statistical analyses) to their values (as parents, as community members, as global citizens). It's time to kick the advocacy taboo to the curb, the two philosophers exhort, arguing that meaningful action arises only when facts ("what is") are welded to values ("what ought to be").

To drive home the urgency of curbing fossil fuel use, Nelson cites sources as diverse as Genesis and Dr. Seuss. At last year's meeting of LTER scientists nationwide he did a riff inspired by *The Lorax*. This scholar of striking contrasts can recite playful couplets one moment and the next, dare scientists to rethink the most basic assumptions of their careers.

"Look, we don't know how to create careers in science that fully empower scientists," Nelson tells a roomful of researchers. "What we do know is this: Everything has changed. You have taught us that. You should ask yourself some questions: Are the old forms of scientific practice working? Or do you need to create another path? What does it mean to be a scientist now? You are studying systems, ecosystems; you know about the necessity of connections. Live what you know. That's integrity." **terra**

What It's Like to Necropsy a Moose

BY MICHAEL P. NELSON

It's physical and sensual. It's not an exercise in hypothetical counter-factuals or wonderings about brains in vats or the playing of a clever devil's advocate. It's hot and uncomfortable and smelly. You flail in vain at ginormous mosquitos with your forearms and shoulders (because your hands are covered in rubber gloves which are covered in moose grease and hold a sharp knife); you record information on a necropsy card; you walk ever-widening circles in search of bones dragged off and chewed on under a balsam fir tree; you cut the tendons between metatarsus and femur, and find the skull and the lower mandible; you tag, and bag, and carry them home.

But unless you have no soul or imagination it's also stunning and humbling. Someone who was intelligent and sensitive and brave, who had no interest in being killed and eaten, fought very hard but died here. And others, who were also intelligent and sensitive and brave, who also fought very hard, were fed here. And the breeze picks up. Little lonely ghosts of an adrenalin-drenched drama linger in this place — you can feel them. And it's appropriate to breathe in and to be deeply silenced by this truth.