



## letters

(Counterpoints continued)


States, the number of centenarians doubled in the 1980s and again in the 1990s. The total now exceeds 70,000 and by 2050 could be over 800,000.

One of the rewards of living a long life is that, for the most part, the extra years are healthy ones. Generally, people who live to 100 exercise their bodies and their brains; they are walkers, bikers, and golfers; they read, paint, play musical instruments; some even continue to work. They maintain close ties with family and friends.

By age 102, two-thirds suffer from some kind of dementia, but the period of serious illness and disability tends to be brief. Gerontologists call this “compressed morbidity” and compare it to the Wonderful One-Hoss Shay in a poem by Oliver Wendell Holmes: a carriage built so carefully that no single part breaks down for 100 years; then it collapses “all at once and nothing first, just as bubbles do when they burst.”

If the program of engineered negligible senescence (ENS) is to be a blessing rather than a curse, it must not only use genetic and medical interventions to extend life, but apply the knowledge that comes from long-term studies of real humans to extend meaningful life. Old age is not necessarily a drag, as our youth culture makes it out to be. A distinguished novelist who was one of the Harvard Study subjects wrote:

“Contrary to all expectations, I seem to grow happier as I grow older. I think that America has been sold on the theory that youth is marvelous but old age is a terror. On the contrary, it’s taken me 60 years to learn how to live reasonably well, to do my work and cope with my inadequacies. For me, youth was a woeful time—sick parents, war, relative poverty, the miseries of learning a profession, a mistake of a marriage, self-doubts, booze, and blundering around. Old age is knowing what I’m doing, the respect of others, a relatively sane financial base, a loving wife, and the realization that what I can’t beat I can endure.”

Now, that makes a lot of sENSE. 

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### Why Inventory?

In the “Letter from the Field” (Winter 2000), there is a photo with a caption that reads “the team of scientists returns with a vast array of unusual specimens.”

How does this “science” protect endangered species again? Tell it to me again, I’ve forgotten what the rationale is. Typically hypocritical, two-faced, irresponsible and insensitive, “scientists” have played a sizable part in contributing to the demise of a “vast array” of species worldwide, by collecting truckloads of specimens with seemingly little or no thought about what they are doing. Ignorance is their Science!

FELICIA SMITH  
Fairfax, CA

Author Brian Fisher responds: *What kinds of living things exist? Where do they live? How are they related? One can identify any bird in North America with a small field guide, so it is easy to think that we know enough about life on this planet and that nineteenth century field collecting is no longer needed. But we know very little about the diversity of life on this planet. Systematists have identified 1.7 million species—a mere fraction of the creatures living among us. For instance, even though ants are a dominant life form in the United States, it is difficult to identify ants and many species are poorly understood. The problem is much greater in tropical countries. In Madagascar where I work, for example, 75 percent of the ant species are undescribed and we have found over 700 new species of ants in the last few years.*

*Some readers may understand this, but still be more concerned with conservation than with increasing biological knowledge. Why should we invest in collection and analysis of biodiversity information globally, you may think, when habitat and species are disappearing so fast? Shouldn’t we instead support their protection and preservation? Maybe we don’t need to know that much about them to protect them. How can collecting and understanding species help conserve them?*

*Conserving tropical biodiversity into perpetuity consists of three basic and overlap-*

*ping steps—save it, know it, and use it. The direct “save it” step often requires knowledge of where a species is found, which requires limited inventories—as small species cannot usually be identified in the field—and mapping diversity. However, our experiences in the tropics lead us to feel that if only this first step is executed, the “conserved” tropical wildland has very little chance of long-term survival, no matter how scientifically well-founded, legally bound, or emotionally attractive.*

*“Inventorying,” an action that demands some taxonomic infrastructure, is not merely making a list but rather building up a picture of biodiversity for people in all areas of society. The users may be children on a guided tour of a park, bioprospectors looking for medicinal plants, national park managers, farmers, or visitors. An initial inventory can provide evidence of the need to set aside land for conservation or other relatively non-damaging uses. Thus, we will be much more motivated and effective at protecting something (and at a much lower cost), when we understand it. Systematics, and the collections it requires, are the foundations for long-term conservation.*

### Whose Bat House?

The bat house plans printed in CALIFORNIA WILD, Fall 2002, should have been credited to the U.S. Geological Survey’s Northern Prairie Wildlife Research Center.

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