ECOSYSTEM SERVICES & EVERYDAY SUSTAINABILITY

Thoughts from the Schooner Bay Institute



In the great debate about humanity's role within the natural ecosystems of our planet, a comment from Jonas Salk, the American medical researcher who developed the polio vaccine, is worth considering. Salk observed: "if all the insects were to disappear from the earth, within fifty years all life on earth would end; if all the human beings were to disappear from the earth, within fifty years all life on earth would flourish."

As a species, we tend to think of ourselves as agents of prosperity, promoters of progress, advocates of order who strive to advance the common good of society. Yet, Salk's contention that human beings are a major impediment to ecological prosperity flies in the face of such readily accepted notions. Why is this? Must the progress of humanity always come at the expense of the well-being of everything else? Is it self-evident, a curse on our species? Or are we free to choose to live in a way which, instead of preventing life on earth from flourishing, actually helps life on earth to flourish?

The answer to this question lies at the very core of Schooner Bay's approach to sustainability; yet before we address it we must first put into context the nature of our relationship with, well ... nature. One way to consider our interaction with the natural world is to think of the outputs of all species as "emissions". Human emissions – garbage, sewage, smog – almost exclusively fall under the category of "waste" and are

detrimental to the health of the natural ecosystem, while the emissions of virtually everything else on the planet serve some productive capacity. In fact, we depend entirely on the emissions of other things for survival; plants produce oxygen that fills our lungs, rivers deliver water that quenches our thirst, seeds are borne aloft by the wind and fertilized by animal byproduct, and on and on.

Collectively, the benefits derived from the natural environment are known as Ecosystem Services. Without a doubt, these services have immense value. Assigning a market price to such things is tricky, but an anecdote can at least create a point of reference. More recently than one might imagine, the quality of New York City's drinking water was among

America's finest. Over time, sewage and agricultural runoff was allowed to contaminate the water supply. When the quality of New York City tap water fell below acceptable standards in the mid-1990s, the city investigated the cost of an artificial filtration plant. The estimated cost of the project was \$6-8 billion in addition to an annual operating expense of roughly \$300 million. That's a lot to pay for an **Ecosystem Service formerly** provided free of charge by the biological processes of the Catskill Mountain watershed.

Recognizing the true value of these Ecosystem Services to the well-being of our civilization could very well lead one to conclude they must be preserved at all costs. Yet, in The West at least, we've become accustomed to a

certain way of life. This is not inherently bad. Individuals with the resources to permit a high standard of living should of course be free to enjoy their success and good fortune. But, is it possible to do so responsibly? Do "creature comforts" by definition conflict with the mores of true sustainability? We think not. There must be a way to live comfortably, dare we say even prosperously, without contributing to the deterioration of our Ecosystem Services. Canadian politician, Alan Gregg, framed the problem like this: "the human race has had long experience and a fine tradition surviving adversity. But, we now face a task for which we have little experience: surviving prosperity."

The post-war period in The West gave us our first real shot at surviving prosperity. By and large we failed, but this need not deter us. In all of human history, progress has only ever been made by learning from our mistakes. Consider briefly the plight of the average suburbanite. He awakes in a 3,000 square foot house. He and his family will inhabit perhaps only half of that space in any given day, though all 3,000 square feet must be climate controlled, furnished and serviced with utilities. He will drive himself to work in a car with four empty seats, gridlocked alongside many other cars with four empty seats. His office building, with its shimmering glass façade, is a poorly insulated solar oven that will require massive energy inputs to climate control. At lunchtime, he'll order a meal whose constituent parts originated thousands of miles away, passing literally hundreds of closer farms as the ingredients are trucked or flown into his city.

We'll spare the reader the rest of our hapless friend's day, but hopefully the point is clear. Our way of living has become almost absurdly wasteful and inefficient. Let us be clear - we do not wish to patronize our readers nor excoriate anyone whose lifestyle may resemble that of our hypothetical suburbanite. By and large, the fault is not their own. These are good people living in a bad system. We have arrived at this conundrum not through intelligent planning and foresight, but courtesy of a short-term decision-making process driven largely by opportunism. Perhaps better than any other species, our survival instincts have permitted the habitation of diverse ecosystems across a range of extremes. Thus, as a species, we have succeeded not by our strength or our wit alone, but by our adaptability. It's time to admit that we're not necessarily living in the smartest nor the most secure fashion, but rather the most convenient in light of the largely arbitrary opportunity set we've been presented. We have not prevailed, we have simply adapted.

What if we could look beyond this primitive short-term survival instinct and towards a more enlightened longterm one? At Schooner Bay, it is our contention that the pursuit of the long-term best interests of our species is positively correlated with the long-term best interests of the rest of life on earth. It is not only possible to live prosperously without contributing to the degradation of the wider ecosystem; true prosperity is by definition the advancement of the

wider ecosystem. Let us quote freely (though with some trepidation) from film-maker, Michael Moore, who said, "I want us all to ... stop behaving like our goal in life is to merely survive. 'Surviving' is for wimps and game show contestants stranded in the jungle or on a desert island. You are not stranded. You own the store ... you deserve better!"

Indeed, we do "own the store" of natural resources, in the sense that it is in our hands for the time being. But, to paraphrase William Faulkner in 1949 as he begrudgingly accepted the Nobel Prize for Literature: "this is only ours in trust." Our claims on the resources of the world are claims on the birthrights of future generations. Take a moment to think of your great-grandparents. They most likely exist as stories and photographs passed down through the years, perhaps a very early memory of a benevolent relative. Thanks to the advent of electronic data storage technology, your great-grandchildren will know you far more intimately than you ever knew your precursors. The relationship is much more tangible, our actions (or inactions) all the more vivid.

All of which returns us to the point of genuine sustainability. After all, if we'll stand judgment in perpetuity, what choices can we make in the here and now to ensure the legacy we leave is a positive one? The 19th Century German scientist, George Lichtenberg, offered a telling truism when he observed: "it is the human tendency to regard little things as important that has created so many great things." At Schooner Bay, we follow the same creed when it comes to

sustainability. Indeed, it is the intensity and persistence of our focus on seemingly minor details that ultimately permits the evolution of holistic sustainability. Or as Mahatma Gandhi once reflected, "all big things are made on trifles; my entire life has been made on trifles."

And so, in our roundabout fashion, we strike at the root of this issue's exploration of Schooner Bay Sustainability. Much ink has been spent on the broader applications of Schooner Bay Sustainability and our biological approach to sustainable living. We are very proud of the million gallon water cistern we've buried under the palm grove. We are excited to have the first communal geothermal cooling system in The Bahamas. We are certain that the quality of our construction and purposefulness of our architectural design are of the highest order. At Schooner Bay, we have spent the last five years creating the most favorable foundation on which to sustainably grow into the indefinite future.

Now it is time to recognize some of the smaller, everyday contributions to Schooner Bay Sustainability. Harkening back to an earlier point, much of what we do on a day-to-day basis to promote sustainability at Schooner Bay involves the control of human emissions. This begins simply by repurposing our waste, an objective that unites Schooner Bay's smallest and most routine sustainability initiatives with its largest and most ambitious. In 2007, a multinational integrated oil company put out an ad that read: "Don't throw anything away. There is no away."

Continued on PAGE 10