

Building Virginia's Heritage

Enhancing stewardship through the "greening" of our tourism infrastructure

By J. Patrick Farley, AIA

Previously the case was made for the role that government is and should be playing in the societal shift toward "greener" building. The prospect of top-down influence trickling into the marketplace, raising awareness and creating change within the general population has progressed beyond theory and is settling into practice. The business and other sectors are beginning to take heed not only because the benefits of better stewardship of the taxpayers' resources are visible, but also due to the growing consensus that environmentally responsible design and building practices yield healthier, more durable and economical places in which to live and work. However, one of the most fertile opportunities – in both the private and public sectors – for extending this influence deeper and more broadly into society is through Virginia's largest and most productive industry - - tourism. Facilities that are created for public enjoyment, appreciation of history and education embody a powerful means of spreading the message – by example – that "green" buildings in particular and sustainable development in general benefit everyone. In so doing, the infrastructure itself can be utilized to help society move beyond simple awareness of issues to actually implementing environmentally sound building knowledge in a way that will gradually have real impact. For a variety of valid reasons, the green 'movement' has taken quite a strong hold in recent years, and it will only be strengthened by publicly owned facilities being developed such that pure efficiency and function are elevated to the didactic. Visitors to recreational, conservationist, historical and cultural sites would take more than the usual experiences home with them: imagine that travelers not only can fill the video or photo album with great memories to pass along to their grandchildren, but that their experiences could actually inspire their approach to the next home improvement or otherwise building project.

The architecture/environment connection

While most people have some sense of what 'conservation' means, there is a seeming lack of awareness of the immense and far-reaching environmental impact associated with

buildings and development. The need to conserve and protect open space, waterways, historic and culturally significant places (and of course, energy) seems to be more of a 'concept' that is broadly accepted and championed as "the right thing to do". However, the primary environmental threat to these precious resources actually originates with the methods and means which are attendant to *how* human developments really occur and this is a connection that has yet to make find its way into the mainstream. Every single decision made in the 'conventional' building process – from the sourcing of structural framing materials to the finishing systems – has ecologically harmful consequences upstream and downstream, both locally and globally. And of course this 'disconnect' is part and parcel to a broader human reality in that our environment is considered 'out there' rather than 'in here' - - though we have deep appreciation for it, we also tend to refer to it as though we are *separate*. Why is this? Over the past two centuries or so - and increasingly as technology has become more embedded in our lives - there has been a continuous disaggregation of things such as science, nature, place, self, sacredness, survival, health, etc. such that our world view has been broken down into specialties and sub-specialties. We've lost the sense of interconnectedness that John Muir was lamenting when he wrote in his journal that "*when we try to pick out anything by itself, we find that it is bound fast by a thousand invisible cords that cannot be broken to everything in the universe...*" We've also become confused over the meaning of "wealth" versus "well-being", which translates almost seamlessly into the "economy-versus-ecology" debate. In contemporary life, it may be that the closest we can come to "re-aggregating" those elements or concepts that never should have been broken apart in the first place is to attempt to integrate them in some meaningful way. Our current systems of recreation, conservation, and preservation are close, but fall short of fully and exquisitely celebrating how humans can and should sustain healthy interactions with other living systems.

The origins of the word "commonwealth", or more specifically, the concept of the "commons" is worth brief consideration. The commons comprises the part of life that is neither the marketplace nor the legal confines of the State; rather, it is the shared heritage and natural assets of us all. The wilderness, oceans, rivers, and sky and all the species that dwell in those

places represent the commons. In addition, our public places, vernacular, shared knowledge, and experiences can and should be considered an extension of the commons – so it is a sort of necessary counterpoise to our market-driven lifestyles in that it also contributes dignity and enrichment to our lives as well as the sense of connectivity with each other – so it is quite fundamental to the health of our communities. Moreover, the “common” “wealth” is certainly not an inchoate construct because it essentially works as a parallel ‘economy’ that feeds and supports the marketplace in providing sustenance as well as the basis for our culture, languages and history. And, if architecture is our means of communicating our intentions and celebrating our place in the world, then green building is architecture’s way of ensuring our commitment to sustaining the health of the commons for future generations.

Tourism as a medium for progress

How can the tourism industry help to advance this cause? With the Virginia Department of Conservation and Recreation’s mission as a starting point: “to conserve, protect, enhance and advocate the wise use of the Commonwealth’s unique natural, historic, recreational, scenic and cultural resources”, it should be implicit in this statement that environmentally responsible building practices are the standard by which all capital projects are executed. It is not enough that our conservation lands, recreational and historic centers simply fulfill missions of this nature; the visitor centers and other supporting infrastructure should be utilized as tools to elevate ecological awareness as it pertains to how we should build not just there, but *everywhere*. These places provide enjoyment and economic returns, but are also about education. Why is this good for us? They give us a sense of ‘place’ within the whole of our society, and of our history and therefore, of our interconnectedness with each other and past generations. Moreover, this promotes an appreciation for the importance of stewardship and its necessity in our efforts to sustain our world for future generations. The architecture of our tourist destinations is loaded with educational potential. Of particular note are the new structures that are built in the more remote and/or ecologically sensitive areas where the cost of providing power and water supply is prohibitive in both financial *and* environmental terms; in some cases, it may even be impossible without

resorting to 'alternative' means. Therefore, the implementation of natural energy systems (solar, wind or hydro) and rainwater collection strategies is not only sensible under these circumstances, it is downright irresponsible not to take advantage of the opportunity to expand the basic purpose of the place to encompass more 'global' concerns.

History, preservation and 'green' building

Even in the case of historic structures that undergo renovations and preservation work, there is an occasion to promote stewardship. While not often viewed through an environmental lens, the preservation of buildings nonetheless covers a critical dimension within the realm of sustainable development and more overt attention needs to be given to this fact. The act of preservation captures a central tenet of green building: it is not what is put *into* a project, but what is left *out* or *avoided* that has the greatest positive impact. . Beyond saving open space and habitat for future generations, breathing new life into old buildings also conserves natural resources, reduces the waste stream and minimizes the impact of raw materials extraction, manufacture and transportation otherwise necessitated by the construction of a replacement structure. In fact, the U.S. Green Building Council's (USGBC) LEED (Leadership in Energy and Environmental Design) rating system awards points for recycling existing buildings. Furthermore, there is also a great opportunity to spread applicable knowledge through showcasing practices and traditions we now consider "sustainable". In the "old days" before technology, cheap energy and globalization had the influence they now do, buildings were created in this manner simply as a response to local climate, physical and other limitations. Natural non-toxic materials of durable quality were procured locally (or regionally) as in the case of the wood harvested for framing and cladding or the brick for walls and other components. Buildings were passively cooled and heated by virtue of strategic siting relative to optimum solar orientation while taking advantage of existing deciduous trees for protection in the hot months, which in turn drop their leaves to allow for winter gain; thermal mass and even convective cooling systems built into exterior walls can be found in some larger historic structures. Depending on the period, the use of fossil fuels did not

play a significant role in building projects - - though this is not to suggest that we eschew modern machinery and attempt to make home improvements using block-and-tackle lift systems.

The inherent efficiency and effectiveness of these early building techniques represents a knowledge base that is integral to the historical value of these places and should be exposed and promoted for public consumption, especially given the statistics regarding travelers with a cultural/historical orientation. This sector of tourism has grown significantly over the past decade or so, with slightly more than half the adult population (118 million) of the U.S. comprising this group. According to the Travel Industry Association and Smithsonian magazine, these individuals spend more within this arena than the average traveler, take longer trips that include airfare, car rental and hotel stays and are typically of the more affluent and educated sector of the populace. Additionally, the statistics indicate that these are people who also tend toward the technological, which is a solid indicator that they are the type to gravitate to attractions that offer more than the usual content. If they can not only feed their hunger for knowledge of culture and history but, through that medium, take with them a new-found appreciation for how we can more responsibly (and economically) inhabit the planet by utilizing traditional building practices, the value of these assets becomes all the greater.

The promise of 'Ecotourism'

Though not as prominent as the cultural and historic arena, consider the 'ecotourism' sector. These businesses expose the Commonwealth's natural resources to thousands of visitors every year. The typical ecotourist is expecting to gain a certain level of knowledge from an experience. They want a *total* experience and to know everything about it before returning to 'normal' life. An ecotour should not just be an adventure, but should provide an educated and heightened awareness of our proper place within our environment. Moreover, ecotourism – by definition - must be sensitive to and respectful of the ecological limits of natural resources, involve and enrich the local people who steward those resources, and should be an industry dependent on careful planning, which includes environmentally sound building practices. Just as it is critical to this end for tour operators to possess a thorough understanding of the areas they open to

visitors, the story of how infrastructure (mainly buildings) connects with, and even restores these natural places ought to be integral to this agenda. Aldo Leopold once wrote, "*Conservation is a state of harmony between men and land*". If this is true, then it stands to reason that practices intended to ensure this balance are holistic: it means that the efforts are not just limited to the 'boundaries' of the physical area to be preserved or conserved, but that they reach far beyond in recognition that there really are no bounds to the larger whole that is our true community. The most effective manner in which intervention in a system can have the most leverage for change is within the "upstream" component. Certainly in the public sector, with respect to our parks and recreation areas, our tax dollars can be used to achieve more responsible and valuable results. Requiring that buildings comply with certain environmental criteria, such as LEED, not only will fulfill a more complete stewardship goal, but will allow limited public financial resources to go a little further over the long term.

Investing for the long term...

In June 2002, voters approved a bond referendum worth nearly \$120 million to fund not only significant improvements to existing parks and natural areas, but to purchase new land to expand our base of commons space. Over a six year period that began last year, roughly 70 projects of various types in our parks and preserves will be completed across the State. While the specifics of most are not available, there are a few projects worth noting, such as Belle Isle State Park in the Northern Neck with its plans for solar electric power among other non-conventional components to be implemented on its new visitor center. At Wilderness Road State Park in Lee County there are several environmentally progressive features being incorporated into their new visitor center and there is already a photovoltaic system powering the radio transmitters to broadcast Civil War history at Sailor's Creek State Park near Petersburg. As in these few cases, environmentally intelligent design simply makes sense (or is a necessity) and should happen simply as a matter of course to achieve the goal for long term durability and performance, but the opportunity to really push the "green" imperative seems just too good to pass up in our State parks. Considering that, in 2002 alone, visitation to our State parks was

worth over \$140 million to our economy – and the statistics indicate that this will only increase - it seems logical that an additional investment in elevating the environmental appeal of these places will more than sustain that growth. Furthermore, given that our parks tend to center around an educational component or mission, there is an even greater occasion to affect young people so that their experiences are not only more fulfilling but, eventually, the thought process with which our generation now struggles becomes second nature to them and so on.

Our tourist attractions have a great deal more economic and ecological value than meets the eye and modern conservation, preservation and public recreational endeavors have become quite successful at balancing these two often-conflicted poles. Not long ago, entire biotic communities – “swamps”, for example – were considered worthless. Now, these wild places (more recently known as “wetlands”) are better recognized as integral components of the public asset base – “natural capital” - that contribute not only to the Commonwealth’s coffers, but to its richness and character. By extension, “Green” buildings and other supporting infrastructure should act as a catalyst to enlighten visitors’ awareness of the interconnections that define natural systems and the impact of human development on them. According to Leopold, “...it is a truism that, as the ethical frontier advances from the individual to the community, its intellectual content increases.” Awareness of the benefits of environmentally conscious design is beginning to find its way into the mainstream through other conduits, especially with the widespread adoption of the LEED system. But, with respect to the interdependent nature of human and other communities, development should aim not only toward building with our common future in mind, but should exhibit and celebrate the means to broader environmental stewardship as a key to the tourist experience. This commitment not only adds to the intrinsic value of the plan, but will inevitably spread through society for the good of all.

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