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O'Donnell Golf Club, 1960s. Photograph courtesy of The Historical Society of Palm Desert, Desert Beautiful Collection.

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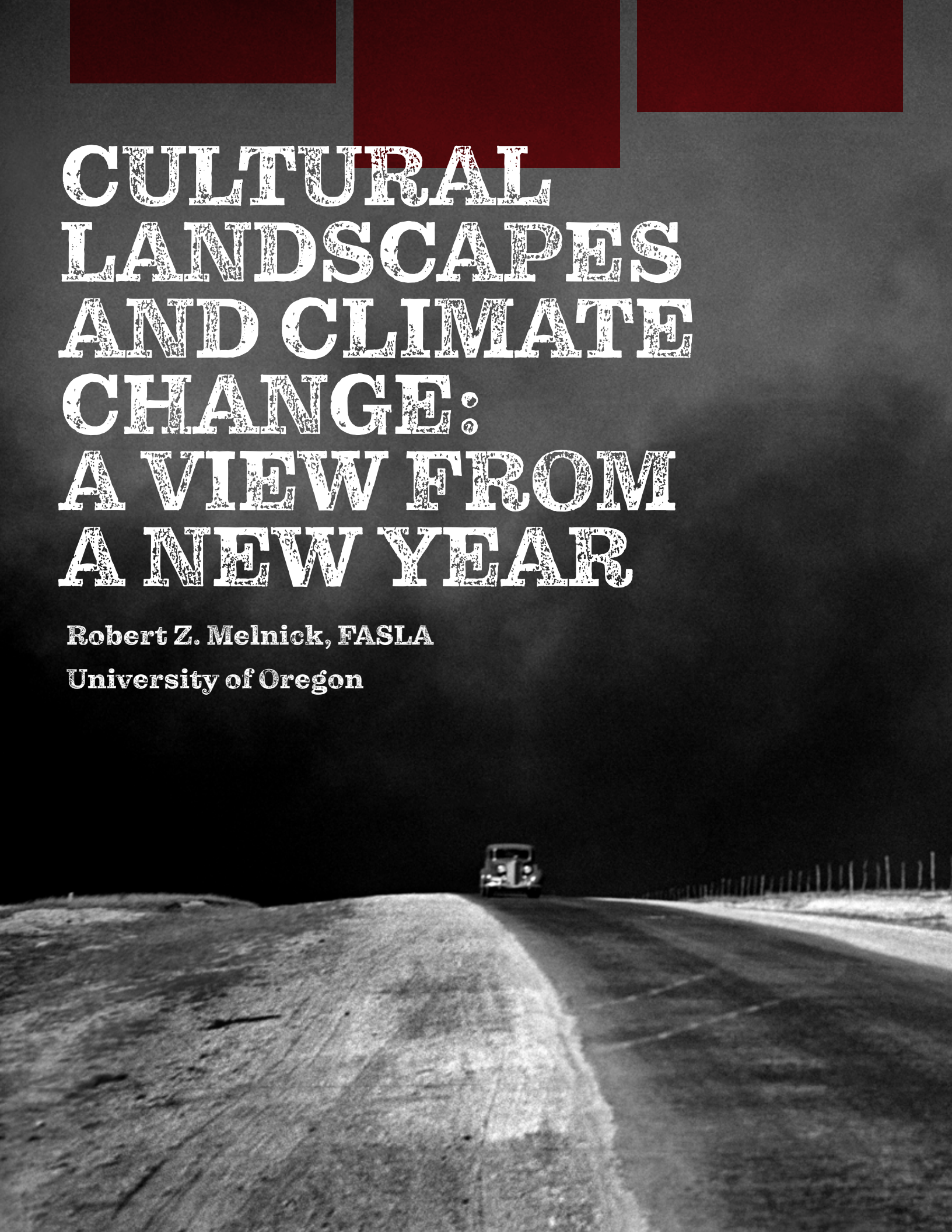
Above: "Old Coast Road" by William Wendt, 1916. The landscape painting by Laguna resident and well-known painter, William Wendt clearly shows the early character. Private family trust - permission granted to publish.

CULTURAL LANDSCAPES AND CLIMATE CHANGE: A VIEW FROM A NEW YEAR

Robert Z. Melnick, FASLA

University of Oregon



A car on a road in the Texas Panhandle with heavy clouds of dust in the sky - a typical phenomenon of the Dust Bowl. March 1936 photograph by Arthur Rothstein (1915–1985). Courtesy Library of Congress, Prints and Photographs Division.

INTRODUCTION

Recent global and national events and reports remind us, yet again, that the earth is only getting warmer, with reports that July 2024 was the earth's hottest month on record, since records were kept starting in 1850. Of note, "the record heat was unusually widespread, with 13.8% of the world's surface experiencing record heat."[1] Coupled with erratic storms and tornadoes it is painfully clear that the landscape we knew - the landscape of our past, the landscape that is the context for wonderful and significant historic resources – is changing before our eyes. The healthy and robust future of these cultural landscapes as affected by changing global climate conditions should be of great concern. We cannot seriously consider the future protection of cultural landscapes without recognizing, accepting, and responding to the clear trajectory of climate change. While climate change is a global phenomenon with local implications, there is no longer any doubt that there is an evolving set of ecological modifications that is a direct result of human activity and climate change.[2]

Heritage preservation, of buildings, sites, or landscapes, has often been challenged by unforeseen developments, too often with responses that have been predictable. We face some difficult choices, opportunities, challenges, and decisions in the coming years.[3] Attention needs to be turned to a range and scale of issues beyond the traditional tasks of resource identification, documentation, and preservation intervention, either at a planning or site scale. The new cultural landscape will be shaped as much by climate change as it will be by long-standing traditions and professional practices.

This article explores ways of thinking about and understanding climate change, its various manifestations in the landscape, and especially its impact on cultural landscape resources. This article is followed by excellent explorations by Laurie Matthews ("Expanding Preservation's Role in Mitigating Climate Change through a Cultural Landscape Framework"), Timothy Babalis ("The Ben Bacon Ranch: An Evolving Cultural Landscape at Pinnacles National Park"), David Laws ("Carmel Valley Manor: A Landscape & Garden History"), and Steven Keylon (Climate Change and Grass at Historic Golf Courses). Each of these pieces dives deeper into a specific issue and/or site, further expanding our cognition of climate modification as an agent of change.

DISASTERS, HERITAGE RESOURCES, AND CLIMATE CHANGE

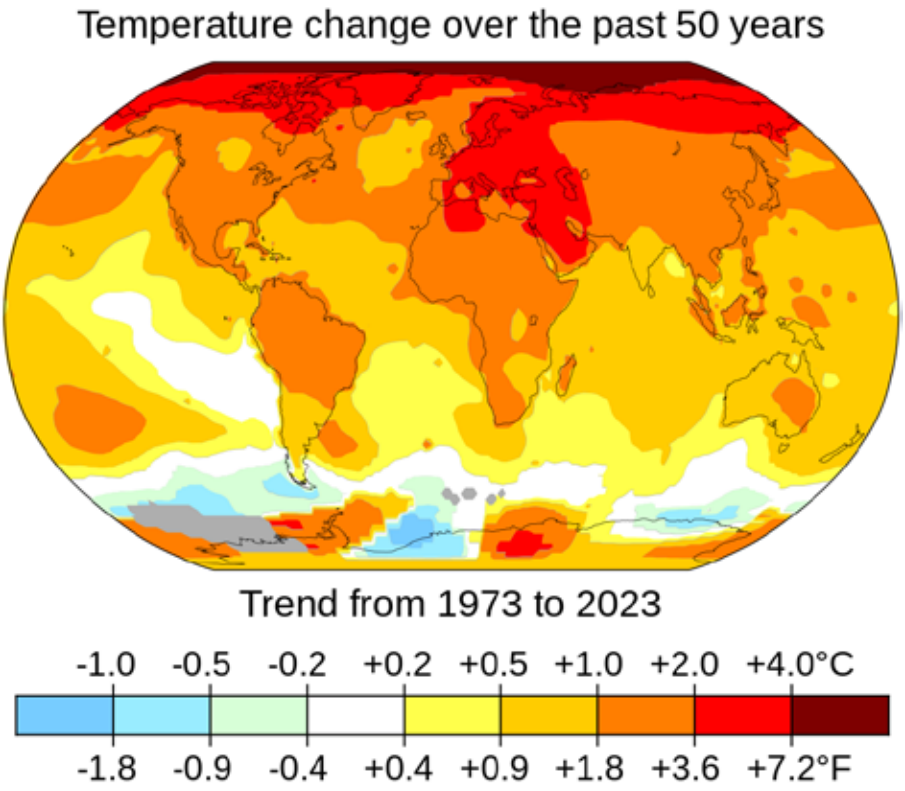
There are many ways to think about climate change. One way is that it is, and will be, a 'disaster,' resulting in a set of changes that cannot be easily predicted. It is a matter of circumstance and relationship.

A personal 'disaster' may present itself when the local grocery is out of your favorite cheese, or you can't find the keys to your automobile. For those who live on the edge of starvation, the lack of any food at all is truly a disaster. These extreme, and admittedly simplistic, examples are reminders that this is a world of relativity and not absolutes. Hot in one location is mild in another, and wet in one landscape may just be the normal winter somewhere else. Recent measurements of the ocean in south Florida place it at over 100 degrees F, hot tub temperature. While context is not everything, it is important.

Heritage resources never exist out of context, except, perhaps, when they are stolen or removed. In these cases, these resources are then considered and appreciated in what is, quite literally, a foreign culture. The same can be said for climate change and cultural landscapes. Climate change response, or anticipation, is best activated when contextual, as well as specific, issues are engaged.

Disasters that will define cultural landscapes come in many forms and shapes, and from many causes and origins. Some cannot be foreseen, and are the result of the normal and cyclical processes of natural systems. The 2011 earthquake and tsunami that hit northern Japan was, by any measure, a disaster impacting the human systems of settlement, energy and food production, and, of course, life itself. It was also a normal and expected event in geologic time. In the Cascade Mountain region of the western United States, the next volcanic eruption is fully expected, if not anticipated; only the date is unknown. The Japanese tsunami was only a surprise because of its timing, not because of its occurrence.

In 2005, Hurricane Katrina was also a disaster, one that dramatically impacted heritage resources across the Golf Coast of the United States.[4] As with many disasters, this was also catastrophic, in that it was quick, overwhelming, and devastating in its impact. Although Katrina looked like a natural disaster, there is ample scientific thought that it was caused by a combination of human



Above: Surface air temperature changes to date have been most pronounced in northern latitudes and over land masses. The image uses the trend of annual averages to smooth out climate variability due to factors such as El Niño. The map is improved from the highest quality rendering that NASA's Scientific Visualization Studio generates, with horizontal and vertical lines removed and with a more legible projection of Kavraiskiy VII. Grey areas in the image have insufficient data for rendering. Courtesy Wikimedia Commons.

actions and the usual and expected cycles of natural systems. These are disasters that result from a combination of nature forces and human actions that aggravate those systems and inflict lasting damage to human systems.

Another very good example of a natural disaster aggravated by human intervention is the Dust Bowl of the 1930s, a period of severe dust storms causing major ecological and agricultural damage to American and Canadian prairie lands.[5] Although droughts had occurred in this region on and off for centuries, the story of the Dust Bowl is an instructive lesson to understand the relationship between human actions and natural forces that often result in calamity. Why, in the 1930s, did so much soil literally fly away, sometimes as far as Washington, DC, over 1500 miles to the east?

The direct explanation is that, in the 1920s, wheat, as well as cotton, became the most popular and economically rewarding crop in the region, so much so that there were millions of acres of grazing land plowed under for wheat production. For previous centuries, this landscape was held in place by the deep roots of native grasses. But when the drought hit in the late 1920s, the temperatures rose and the winds blew, and the grass was plowed under and gone. The problem was compounded because wheat is a crop with shallow roots that is harvested every season. The topsoil took flight, no longer secured by perennial natural vegetation, and the decade turned into a disaster by any measure, a disaster that could have been averted. There still would have been a drought, but not a Dust Bowl, with its ensuing damage and harm to so many people, families, and communities. The 1930s Dust Bowl dramatically impacted the cultural landscape of the middle one-third of the continental United States and portions of Canada. Out of this disaster rose the US Soil Conservation Service, as well as other programs, to engage in long-term efforts to avoid another Dust Bowl.

These two examples suggest that there is a need to think of the varieties of disasters, and especially the uncertainty about their occurrence, their impact, and human response. In order to anticipate the shape of the cultural landscape in the future, the new cultural landscape, it is valuable to think about these types of events before they happen, even if the specifics are unknown, as there will inevitably be the need to respond rapidly.

CLIMATE CHANGE AND ITS IMPACT ON CULTURAL LANDSCAPES

Another type of disaster exists, one that is often unseen because it is not immediate and it is not generally considered catastrophic. This is the slow erosion of heritage resources as they are impacted by forces outside the purview or control of heritage preservation, but forces and dynamics that must be addressed if the goal of providing future generations the opportunity to locate themselves in time and space is to be achieved.

Climate change is complex and too often simplified, rather than clarified. While they are sometimes sudden and dramatic, disasters can also occur in a more subtle way, revealing their impact as time unfolds and there is the opportunity to reflect on what has occurred. An important consideration is what climate change might mean for those directly concerned with heritage resources, and how climate change will affect the endeavor of defining and protecting these significant places.[6]

It is helpful to consider climate change from a humanities and preservation perspective. While science is of course concerned with people, understanding the potential impact of climate change on resources that matter in our society is a valuable endeavor. Confronting the human impact of these forces, in addition to the biological, ecological, and environmental scenarios, allows for a more measured and considered response. For starters, climate change is an idea, not just a physical phenomenon. As climate scholar Mike Hulme statesstates: '… our cultural, social, political and ethical practices are reinterpreting what climate change means.'[7]

Based on longitudinal scientific evidence, human action is changing the climate of this planet. While the pace of change is not always clear, or even its extent, the evidence demonstrates that climate change is happening. Climate, however, is not the same as weather. Weather is today and tomorrow; climate is long-term and cyclical, with greater impact on societal systems and cultural resources. Climate is also more difficult to see, beyond the broad generalizations, which are often too broad and lack sufficient detail to be useful.

There are broad human and societal

impacts of climate change, just as there are for any other disaster, and these often get overlooked in the popular literature. Among these are the impacts on heritage resources, which are most valuably evaluated critically, and not dogmatically.

Landscapes have evolved and changed over time in response to essential human needs of settlement, habitation, food production, economic viability, and security, in the very broadest meaning of that term. These dynamic systems evolve over time, as their living features (e.g., trees, shrubs, grasses, vines) grow and die as part of the normal and expected life cycle,[8] and other components (e.g., river systems, topographic features, and coastlines) are restructured through natural ecological processes. In this sense, landscape is always a noun *and* a verb. One cannot think about a landscape without considering what it is now, of course, but also how it is always changing, always evolving. This is especially so when climate change is considered, but is a fundamental understanding of cultural landscapes as well. Landscape is something that *is*, but also something that *happens*.

As the twenty-first century advances, questions and concerns around climate change are clearly ever more pressing. Although it may seem that some seasons are cooler, or wetter, or drier, or just like they have always been, the overwhelming scientific evidence is that the planet has, in fact, embarked on a period of substantial climate change.[9] Carl Safina asks us to look at and comprehend the impact of environmental change on the known and revered world. In many ways it is an enticing humanities perspective on a scientific concern, articulated by an ecologist and marine conservationist.

The work of landscape architects and even many landscape historians is essentially, but not exclusively, prescriptive. Embodied in this work is the understanding that the landscape is dynamic and never static. This is not a new or unique idea, of course, but it is essential to grasp, in order to engage both the long and short view on issues of heritage resource protection and disasters.

This is the backdrop for exploring the consequences of climate change on the ways landscape history is approached, and even more so the societal necessity and even urgency to protect those places that visibly reflect and reveal the poetics of the human condition. In the heritage preservation community, cultural landscapes have only relatively recently been recognized, and attention to them often still challenges preservation dogma and theocracy.[10] Although the study and protection of significant cultural landscapes is now generally accepted within international intellectual and governmental frameworks, this has not always been the case. In many ways these significant places are 'strangers in a strange land.'[11]

Cultural landscapes are outside of preservation orthodoxy, which is built on the

Above: In summer, some polar bears do not make the transition from their winter residence on the Svalbard islands to the dense drift ice and pack ice of the high arctic where they would find a plethora of prey. This is due to global climate change which causes the ice around the islands to melt much earlier than previously. The bears need to adapt from their proper food to a diet of detritus, small animals, bird eggs and carcasses of marine animals. Very often they suffer starvation and are doomed to die. The number of these starving animals is sadly increasing. Andreas Weith photograph, courtesy Wikimedia Commons.

traditions of history, historic architecture, and prehistoric and historic archeology. In those fields, especially as they intersect with heritage conservation, primary emphasis is most often placed on both cultural origins and resource stability. While these principles have developed an elasticity in recent years, the origins of heritage preservation are grounded in the need to know a place's earliest moments, and the need to resist change to its structure, attributes, and details.

These principles are expressed in many ways, primarily through the criteria for the National Register of Historic Places and the Secretary of the Interior's Standards for the Treatment of Historic Properties.[12] In both of these documents, for example, a property's 'integrity' is of primary value. In this context, 'integrity' is a measure of a property's present condition as compared with what it was during the period from which it gains significance. The closer a property is today to its historic condition, the greater its integrity. What does this have to do with climate change and protecting cultural landscapes? More importantly, how might climate change lead to a reexamination of what is meant by 'integrity?" Can the argument be made that

Left: An aerial view of damage to Sukuiso, Japan a week after the 9.0-magnitude earthquake and subsequent tsunami devastated the area in 2011. U.S. Navy photo by Mass Communication Specialist 3rd Class Dylan McCord, courtesy Wikimedia Commons.

'cultural landscape integrity' does not carry the same criteria as that for other heritage resources, particularly architecture or archaeological sites?

While a landscape is protected in order to understand its cultural value and meaning, the processes of landscape dynamics are often overlooked in this conversation. In light of sobering climate change predictions and realities, however, re-thinking and re-envisioning strategies for protecting, and perhaps even understanding, significant cultural landscapes is helpful. Unlike the established preservation orthodoxy, historic landscape preservation is often based on embracing change, rather than resisting it.[13]

Landscapes present a challenge, insofar as the landscape is composed of elements and character-defining features that are dynamic by their very nature, such as trees, shrubs, vines, soil, tectonic plates, gravel paths, and even the color and mood of the sky. As established by the National Park Service, landscapes are identified, analyzed, recorded, and evaluated using standardized methods. There is a need, in one sense, to codify the approach to historic resources, in order to ensure, at a national scale, that they

Above: Wind damage from Hurricane Katrina, Baton Rouge, Louisiana. "USGS Hurricane Katrina. Baton Rouge, two houses from D.K. Demcheck's house. Baton Rouge suffered from downed trees and power loss. Photograph taken August 29, 2005. U.S. Department of the Interior U.S. Geological Survey photo.

are considered and treated comparatively. Whether it is through National Register Bulletin 30 on rural landscapes,[14] Guidelines for the Treatment of Cultural Landscapes as set forth in the Secretary of Interior's Standards for the Treatment of Historic Properties (US Department of the Interior), or NPS Technical Preservation Brief 36 on cultural landscapes,[15] the goal is to provide uniform standards by which to achieve the goal of historic landscape conservation or protection.

All of these documents, however, consider the landscape within a constant or predictable context and fail fully to appreciate or duly recognize the dynamic nature of the larger environmental context. The codified criteria assume that the larger ecological context is static, within an acceptable dynamic range, such as seasons, warm or cold years, or wet or dry summers. Each of the directions for recognizing, evaluating, and treating cultural landscapes assumes a greater level of constancy than it is now experienced or reasonable to anticipate. This results in an approach to landscapes that is not fully adaptable to systemic variations and idiosyncrasies, and which, by its broad distribution as official imprimatur, affects a wide range of efforts and activities.

CULTURAL LANDSCAPE ADAPTATIONS TO CLIMATE CHANGE

There are a number of adaptations to be considered as the vision of landscape conservation is altered in response to these new realities.[16] These adaptations represent both challenges and opportunities. They should not be taken as answers, as they are perhaps best considered as an agenda for future research, scholarship, and intervention.

It is fundamental to accept the premise of an uncertain, yet certainly variable, future for all heritage resources, especially cultural landscapes.[17] It is important to consider both short- and long-term efforts. In this light, resistance to change can be attempted, but tolerance for change as well, perhaps in the form of a more flexible understanding of what is meant by character-defining features and integrity, and the nature of the response to those changes.[18]

Promoting resilience to change is a substantial challenge but one that should be addressed, and may mean greater proactive intervention, rather than waiting till until undesired change has occurred. This includes setting priorities. There are positive steps that can be taken, such as engaging in greater seed-banking or intensive management during re-vegetation, a labor-intensive and costly process that nonetheless may enable the protection of critical landscape features.[19]

Perhaps the most difficult actions will be decisions about which resources to try to save, which landscapes are salvageable, and which landscapes are not.[20] In the extreme, this may mean a form of 'cultural-landscape triage,' choosing to save certain places while letting others remain only in the historical record. What is the basis for triage decisions? Who makes them, and are they based primarily on available *fiscal* resources as opposed to the significance of historic *landscape* resources?

It will be instructive to learn how others are approaching this issues, such as ICOMOS and the Noah's Ark project in Europe, which "aims to improve the [protection of cultural resources] through a deeper understanding of the behavior and response of immovable cultural heritage and historic materials to the [impacts of climate change], discovering possible endangering synergistic processes and providing cultural heritage managers, decision-makers and legislators with scientifically sound data and models." This cannot be an emotional or humanistic argument alone.

Above: Flooding in New Orleans after levee failure disaster during Hurricane Katrina, photograph taken September 11, 2005. Courtesy U.S. National Oceanic and Atmospheric Administration.

Left: Severely eroded farmland during the Dust Bowl, circa 1930s. Courtesy U.S. Department of Agriculture.

Above: The Bridge Fire in the Angeles National Forest on September 9, 2024. Angeles National Forest photo, courtesy Wikimedia Commons.

Finally, the long, or broad, view is valuable, as the 'historical ranges of variation' are recognized.[21] Taking both the long and short views is vital in this effort. While it is often tempting or convenient to look at the most recent past, landscape time and heritage resource time, demands the consideration of variations over a long period. Promoting resilience to change is a substantial challenge but one that should be addressed, and may mean greater proactive intervention, rather than waiting till until undesired change has occurred. Taking only the immediate snapshot in the rearview mirror can result in a failure to recognize the nature and impacts of climate change, relying too much, perhaps, on last year's rainfall gauges, this year's storm data or next year's temperature graph. Weather, of course, has not been constant, but there have been understandable and identifiable 'normal' ranges of variation that can be used as a baseline.[22]

How do all heritage resources, not only landscapes, respond to these subtle changes that threaten them with potential disaster? It is not sufficient to merely sit on the sidelines and observe as these cultural landscapes and other heritage resources are slowly overwhelmed by rising sea waters. The changing nature of the climate will, without a doubt, impact the way that landscapes of great cultural value evolve, and also affect the ways in which they are seen, understood, and protected.

READINGS

Bartok, Mira. 2011. *The Memory Palace.* New York. Free Press.

Birnbaum, Charles A. 1994. *Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes.* http://www.nps.gov/hps/tps/briefs/brief36.htm

Brown, Michael F. 2004. *Who Owns Native Culture?* Cambridge. Harvard University Press.

Browning, Dominique. 2011. Review of: *The View from Lazy Point*, by Carl Safina. *New York Times* Book Review. P. 11. January 16.

Carroon. Jean. 2010. *Sustainable Preservation: Greening Existing Buildings.* Hoboken, NJ. John Wiley & Sons

Cullen, Heidi. 2010. *The Weather of the Future: heat waves, Extreme Storms, and Other Scenes from a Climate-Changed Planet.* New York. Harper.

Del Tredici, Peter. 2007. "The Role of Horticulture in a Changing World," in Conan and Kress, eds. *Botanical Progress, Horticultural Innovations and Cultural Changes*, Washington, D.C.: Dumbarton Oaks: 259–265.

Egan, Timothy. 2006. *The Worst Hard Time.* Houghton Mifflin

English Heritage. 2008. "Climate Change and the Historic Environment," .org.uk/upload/pdf/Climate_Change_and_the_Historic_Environment_2008.pdf.>

Epstein, P.R. and McCarthy, J.J. 2004. "Assessing Climate Stability," *Bulletin of the American Meteorological Society*. August.

Flannery, Tim. 2005. The Weather Makers: How Man is Changing the Climate and What It Means for Life on Earth. New York: Atlantic Monthly Press

Gates, Phil. 2002. *Gardening in the Global Greenhouse: The Impact of Climate Change on Gardens in the UK.* Oxford: UK Climate Impacts Programme.

Heinlein, Robert. 1961. *Stranger in A Strange Land.* New York. Putnam Books

Intergovernmental Panel on Climate Change. 2007. "Summary for Policymakers," in Metz, Davidson, Bosch, Dave, and Meyer, eds. *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge: Cambridge Univ. Press

Hulme, Mike. 2009. *Why We Disagree About Climate Change.* New York. Cambridge University Press

ICOMOS. 2003. The Hoi An Declaration on Conservation of Historic Districts of Asia.

ICOMOS. 2005. Xi'an Declaration on the Conservation of he Setting of Heritage Structures, Sites and Areas. Xi'an.

(International ICOMOS 1994), *The Nara Document on Authenticity*. http:/www.international.icomos.org/nara_eng.htm

ICOMOS. 2007. International Workshop on Impact of Climate Change on Cultural Heritage. New Delhi.

ICOMOS. 2009. Thematic Workshop on Cultural Heritage and Climate Change. 16th General Assembly and Scientific Symposium. Quebec.

King, Dorothy. 2005. *The Elgin Marbles: The Story of Archaeology's Greatest Controversy.* London. Hutchinson.

Kuhn, Thomas S. 1962. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press

Laird, Mark. 1998. "Climate, Weather and Planting Design in English Formal Design of the Early 18th Century," *Die Gartenkunst des Barock, ICOMOS Journals of the German National Committee* 28:14–19.

Laird, Mark. 2005. "The Impacts of Climate Change on Historic Landscapes," in *The Significance of Setting: Conserving Monuments and Sites in Changing Canadian Cultural Landscapes.* Toronto: ICOMOS Canada.

Masters, Jeff and Bob Henson. 2024. 14 Consecutive Months of Record Global Heat. Yale Climate Connections. August 15. https://yaleclimateconnections.org/2024/08/noaa-july-2024-was-earths-hottest-month-on-record/

McCarthy, Deidre. 2011. Assessing Cultural Resources in the Wake of a Disaster. Paper presented at the George Wright Society Annual Conference. March 15, 2011. Cultural Resource GIS Facility. National Park Service. Washington DC.

McClelland, L.; J. T. Keller; G. P. Keller; R.Z. Melnick. 1990. *Guidelines for Evaluating and Documenting Rural Historic Landscapes.* Bulletin No. 30. National Register of Historic Places. National Park Service. U.S. Department of the Interior: Washington, D.C.

Melnick, Robert Z. 2009. *Climate Change and Landscape Preservation: A Twenty-First-Century Conundrum.* APT Bulletin: Journal of Preservation Technology. 40:3-4, pp. 35-42.

Millar, C. and Woolfenden, W. 1999. The Role of Climate Change in Interpreting Historical Variability. *Ecological Applications* 9(4):1207-1216.

Millar, C., Stephenson, N., and Stephens, S. 2007. "Climate Change and Forests of the Future: Managing in the Face of Uncertainty," *Ecological Applications* 17, no. 8: 2145–2151.

Noah's Ark: http://noahsark.isac.cnr.it/overview.php

Oregon Climate Change Research Institute. 2010. *Oregon Climate Assessment Report*, K.D. Dello and P.W. Mote (eds). College of Oceanic and Atmospheric Sciences, Oregon State University, Corvallis, OR

Safina, Carl. 2010. The View From Lazy Point. New York. Henry Hold and Company.

Shoard, Marion. 1981. "Why Landscapes Are Harder to Protect Than Buildings," in Lowenthal and Binney, eds. *Our Past Before Us: Why Do We Save It?* London: Maurice Temple Smith. pp 83–108.

Steyn, Mark. "Climate Change Myth," *The Australian,* Sept. 11, 2006,

UNESCO World Heritage Centre. 2002. "Cultural Landscapes: The Challenges of Conservation. World Heritage Papers 7," see: unesdoc.unesco.org/images/0013/001329/132988e.pdf.

UNESCO 2011, *Operational Guidelines for the Implementation of the World Heritage Convention*, Paris, UNESCO World Heritage Centre

US Department of the Interior. *Secretary of Interior's Standards for Preservation and Guidelines for Preserving Historic Buildings.* http://www.nps.gov/hps/tps/standguide/preserve/preserve_index.htm. Accessed 23 January 2011.

Above: A view of burned trees in Lassen National Forest, California, United States of America. Inklein photograph courtesy Wikimedia Commons.

Endnotes

1 Masters and Henson, 2024.

2 Epstein and McCarthy, 2004; Intergovernmental Panel on Climate Change, 2007

3 Carroon. 2010

4 McCarthy 2011

5 Egan. 2006

6 Cullen 2010

7 Hulme 2009: xxv

8 Laird 1998

9 Oregon Climate Change Research Institute 2010

10 UNESCO 2002

11 Heinlein. 1961

12 Birnbaum. 1994

13 Shoard 1981

14 McClelland, et. al. 1990

15 Birnbaum 1994

16 Melnick. 2009

17 Millar et.al. 2007

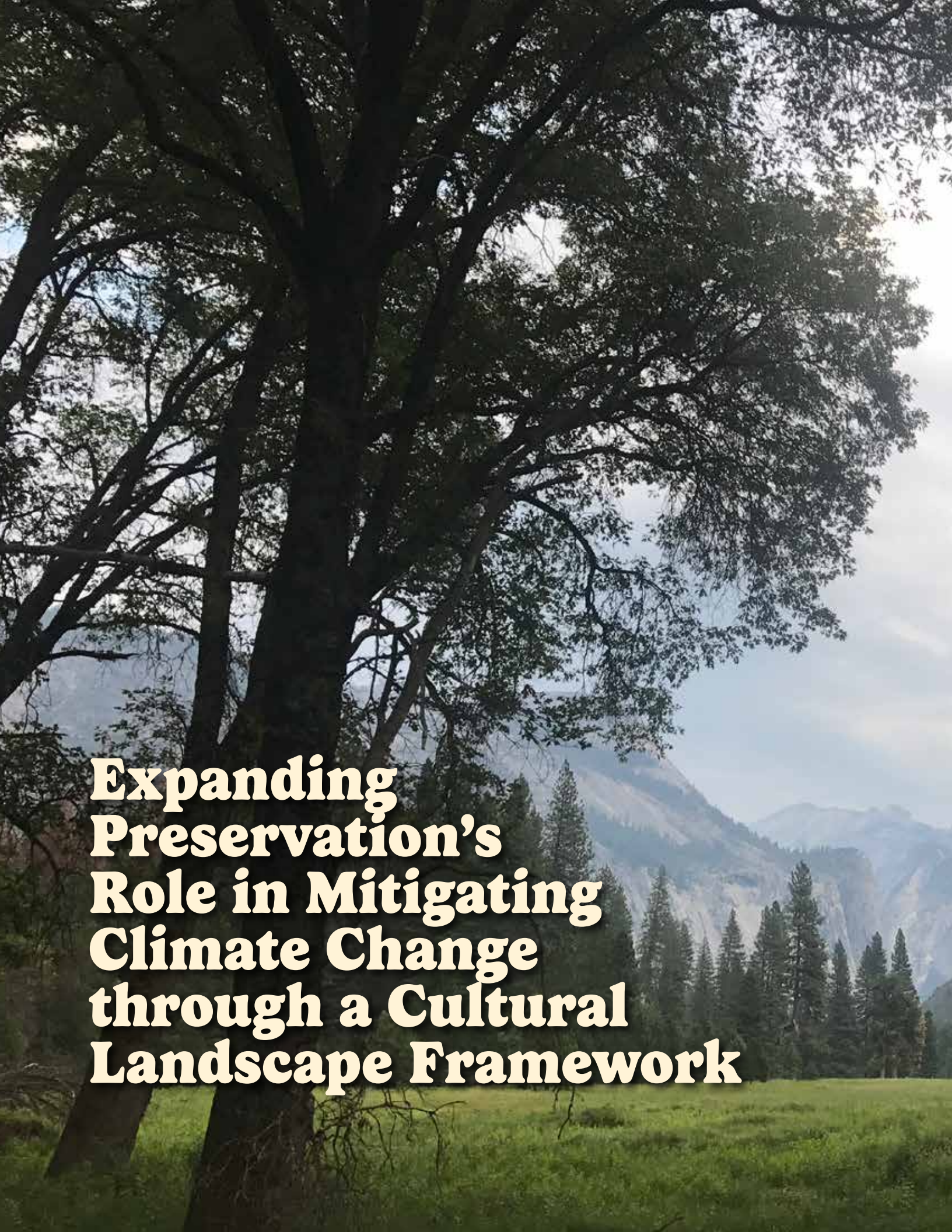
18 Gates 2002

19 English Heritage 2008

20 Laird 2005

21 Millar and Woolfenden 1999

22 Del Tredici 2007



Expanding Preservation's Role in Mitigating Climate Change through a Cultural Landscape Framework

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Image courtesy Laurie Matthews

While historic preservation is often seen as a past-focused endeavor, it can also be used as a future-focused tool to expand our approach for not just protecting against climate change but mitigating its impacts, particularly when using a cultural landscape preservation approach. That approach challenges us to consider how we can think more holistically and broadly about preservation-minded solutions. A shift that can increase the resiliency of places while encouraging the preservation of their historic character.

Some of the leading work on the topic of cultural landscapes and climate change has been spearheaded by the University of Oregon's Cultural Landscape Research Group led by noted cultural landscape expert Robert Melnick (who has also contributed to this volume of *Eden*). That team developed best practices and methods for addressing the effects of climate change on cultural landscape characteristics and features.

The heart of that framework merges the evaluation of a resource's vulnerability with its significance to determine a set of prioritized solutions. A framework that can be easily adapted to mitigate the overall effects of climate change by incorporating an ecosystem planning approach that looks at the landscape scale systems at play and uses that understanding to frame an even wider array of solutions.

The following case studies, primarily from California, illustrate how this shift in focus has and can continue to help solve complicated climate change issues through a cultural landscape lens. The three main impacts of a changing climate that will be addressed include wildfire, flooding, and vegetation loss due to pests or diseases.

Wildfire | Point Reyes National Seashore and Hearst Castle

At Point Reyes National Seashore in California, and throughout the western United States, wildfires are a major annual threat. I think we've all thought they could only happen in the western United States or similar climates, and the two following examples are from that part of the world, but temperatures rose above 100 degrees Fahrenheit for the first time in England recently, a country known for its damp and temperate summers, where they had to address wildfires that erupted in both urban and rural areas near London. What this shows us is that our planning efforts need to be aware of all effects of climate change, not just those that seem most likely at present.

One cause of the fires, coupled with the warmer and drier climate, includes electric grid infrastructure that sparks fires in nearby woody vegetation. Warmer and drier climate conditions have persisted for years,

Left: At Point Reyes National Seashore in California, the aftermath of haphazard tree pruning and removal in the name of fire prevention is striking. [Photo courtesy MIG, Inc.]

Below: This historic cypress windbreak will be replanted with the next generation of trees offset from the original to separate it from any utilities, give the new trees the space they need to grow, while retaining the windbreak's form and function which will help mitigate winds from more intense storms. [Photo courtesy Laurie Matthews]

Above: At Point Reyes National Seashore, many of the developed core areas of the historic ranches were built adjacent to streams which are flooding more frequently causing erosion issues around buildings and circulation infrastructure.

and combined with aging and often poorly maintained electric infrastructure, wildfires have sparked in grassy and woody vegetation. Due to the devastation of these events coupled with the urgency of addressing them, applying narrow-focused solutions is common and has led to compounded disasters where a historic cypress windbreak at one of the park's historic ranches was rashly removed. While this is problematic from a resource protection and integrity perspective, ironically it also removes a landscape feature that can help mitigate another effect of climate change in this region, namely higher winds associated with more frequent and intense storms coming off the Pacific Ocean.

This myopic solution leaves places like Point Reyes National Seashore less resilient and protected from climate change impacts. Applying a more holistic approach incorporating cultural landscape preservation principles can provide a more effective solution, especially since it focuses on retaining the feature in a way that preserves its character and buffers it from the hazard.

Burying the electric lines is one solution, but this is not always feasible, so another option involves replanting the next generation of trees offset from the original to separate it from the hazard of the utility lines while retaining the windbreak's form and function. This should be combined with more sensitive pruning of the mature trees – reducing the dead woody mass while also increasing access to light for the new plantings. As the windbreaks die or deteriorate, many of which are reaching the end of their natural life, this new planting will regenerate the feature and continue to provide climate protection to the ranch's domestic cores.

This is just the tip of the iceberg when it comes to developing solutions that merge the mitigation of wildfire impacts with cultural resource stewardship. At Hearst Castle, further south along the California coast, the removal of extremely flammable eucalyptus groves that had sprouted up around the edge of the hilltop due to an increased supply of water from a leak associated with the Neptune Pool both decreased the wildfire threat and restored historic views that had been obscured by the unplanned vegetation growth. As one wildfire expert graphically pointed out, these trees are like firecrackers given the highly volatile oils inherent in the trees. Therefore, the recommendation to remove eucalyptus trees restored key historic views at the same time it mitigated a threat heightened by climate change.

A pest, the woolly adelgid, is killing Eastern hemlocks leaving ghost trees and holes in the forest canopy. At Saint Gaudens, the hemlocks which form the site's iconic hedges will be affected by the woolly adelgid as it moves north. One solution, Top, is to intersperse other plant species within the hedge to decrease its reliance on one plant. The other solution, Bottom, is to replant portions of the historic hedge with potentially pest resistant hemlock cultivars. [Photo courtesy Laurie Matthews]

Flooding | Point Reyes National Seashore

Heading back north to Point Reyes National Seashore provides a case study for addressing flooding issues associated with both sea level rise and increased stormwater runoff. Many of the developed core areas of the historic ranches were built adjacent to streams which are flooding more frequently causing erosion issues around buildings and circulation infrastructure. A solution that focuses narrowly on the area of impact can protect the resource in the short term, but will likely not be holistic or robust enough to meet the projected impacts associated with increased heights and speeds of water flows. It's like applying a band-aid to a wound that needs surgery.

Widening our view to the landscape scale of the stream's watershed opens opportunities. For example, increasing the size of wetlands or flow capacity upstream would be beneficial in addressing increased water flow during storm events by providing a place for the water to go and slow down before it reaches an area with heightened sensitivities like the ranch's core building area. Applying a similar solution downstream, between the ranch's core and the bay, can help mitigate sea level rise coming from Drakes Estero. This landscape scale ecological systems-based solution would increase the overall resiliency of the historic property to flooding beyond the immediately identified threat. In general, prioritizing the protection and even increasing the number and scale of wetlands in our landscapes will increase our resiliency to water-based climate change impacts.

Above: A meadow in the Yosemite Valley. [Laurie Matthews]

Opposite: In California's Sierra Nevadas the pine bark beetle is killing the forest's pines, including in Yosemite Valley, the impact of which can be seen here. The beetles impact an outer ring (highlighted in green) where nutrients and water are transported from the roots to the rest of the tree. [Laurie Matthews]

Vegetation Loss | Saint Gaudens National Historic Site and Yosemite National Park

Finally, we will look at an issue that is affecting cultural landscapes of varying scales and geographic locations. Climate change is facilitating and will continue to increase the ability of pests and diseases to eliminate large swaths of single vegetation species in various regions. For example, in Shenandoah National Park, the woolly adelgid is killing Eastern hemlock leaving ghost trees and holes in the forest canopy. As we know, increasing, and not decreasing, our planet's tree canopy is an effective way to stem the effects of increased carbon dioxide in our atmosphere. Merging ecological and preservation frameworks to develop solutions can broaden the options available and ensure we make more holistic decisions to mitigate climate change impacts and resource losses. Examples of this issue at two landscape scales include the garden scale at Saint Gaudens National Historic Site in New Hampshire and the landscape scale at Yosemite National Park in California.

At Saint Gaudens, the hemlock which form the site's iconic hedges will be affected by the woolly adelgid as it moves north. One solution is to replant portions of the historic hedge with potentially pest resistant hemlock cultivars. This is an approach that has succeeded for the American elm which was similarly threatened and depleted due to Dutch elm disease. Another solution is to find a tree species that is similar in character, such as another feathery evergreen conifer not affected by a pest or disease, and replant hedges with that species. Going a step further and incorporating ecological best practices, more than one alternative species or cultivar could be used in the replaced hedge to avoid reliance on a monoculture. Not having the hedge consist of a single species would protect and increase the hedge's future resiliency should a threat develop with the replacement species.

In California's Sierra Nevadas the pine bark beetle is killing the forest's pines, including in Yosemite Valley. This is having a devastating effect on the forest, radically altering and reducing the canopy. While some areas will likely be open to regenerate with other native tree species, applying a

historic preservation lens can broaden the number of solutions under consideration.

For example, oak meadows which are critical to both the cultural character and habitat diversity of the valley since time immemorial, have suffered losses of geographic scale due to the cessation of regular burning that previously kept encroachment of conifers like pines at bay. Since the Southern Sierra Miwok were forced out of the valley in the mid to late nineteenth century that practice went dormant until more recent years when the park began reutilizing that method to clear some of the pine beetle-effected vegetation areas. This provides an opportunity to bring back a cultural landscape management practice that will help restore a diminishing type of cultural landscape, namely the California black oak meadows, which will in turn increase habitat diversity, and through both actions increase the resiliency of the valley to similar types of future threats.

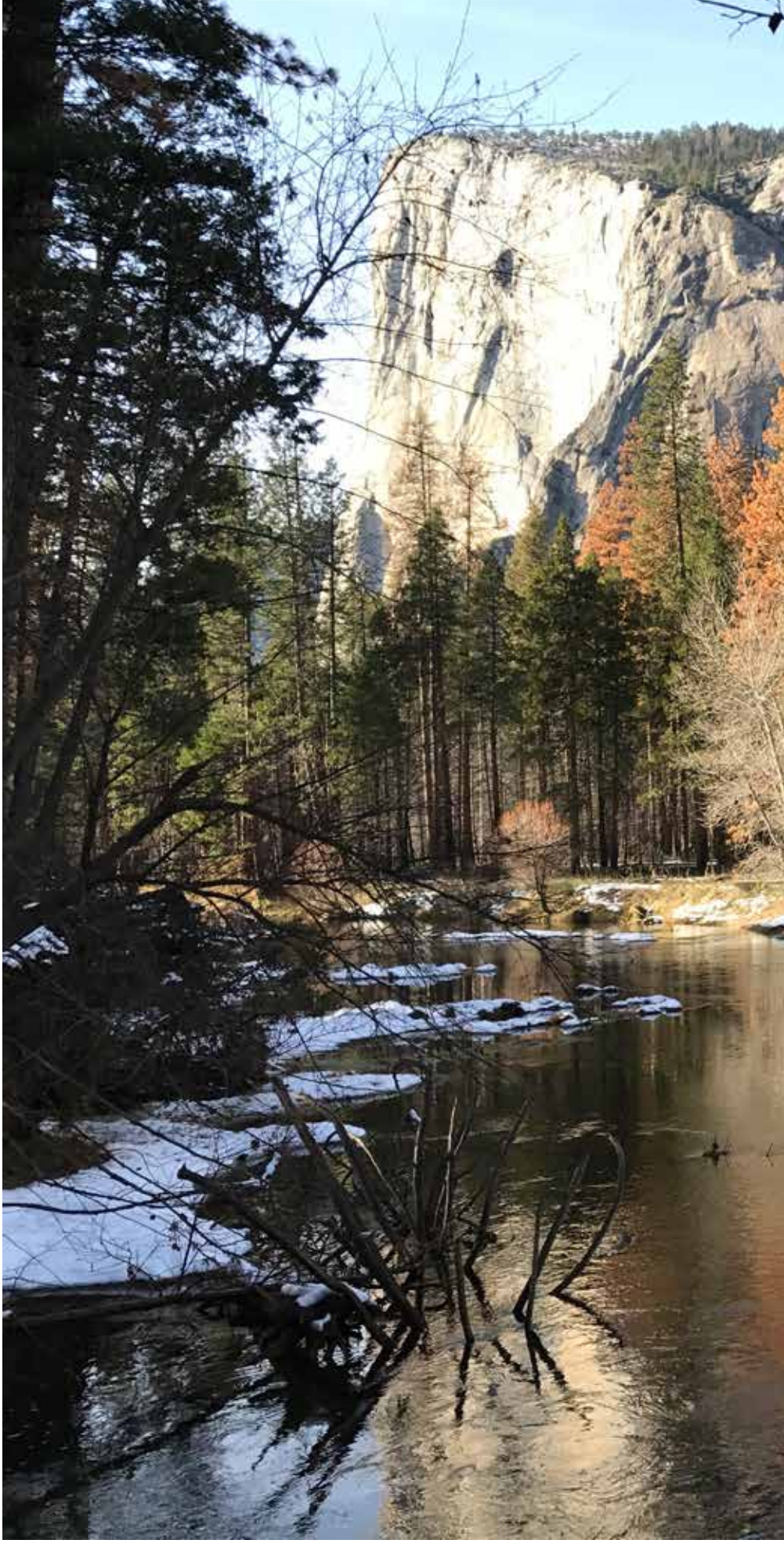
Conclusion

These are just a few examples of how utilizing a cultural landscape framework provides benefits when addressing the effects of a rapidly changing climate on historic properties. It encourages a holistic approach that inherently understands the role of change and how to manage that change. While preservation is often perceived as a past-focused profession

these examples show how it can also be used as a future-focused tool to expand our approach from just protecting resources to mitigating climate change impacts.

The philosophical and methodological foundation of cultural landscape preservation embraces change as part of the conversation. So, when we think about climate change, namely rapidly accelerating impacts, what better framework to use than one which has already grappled with and set forth best practices and guidelines for historic and cultural resources that inherently change. The key is flexibility within certain parameters with the understanding that some historic fabric can change if the overall character is retained.

Our practice often looks to ecological approaches for solutions, given that cultural landscapes are as steeped in our culture as our natural world. In our experience, that encourages a broader and deeper understanding of the effects themselves since it pushes us to see the bigger picture, in both scale and time, promoting flexibility in our approaches. In essence it gives us more tools in our toolbox, and that is something which will be incredibly valuable moving forward.



Right: Pines at Yosemite are dying due to pine bark beetle infestation. [Image courtesy Laurie Matthews]

The Ben Bacon Ranch:

An Evolving Cultural Landscape at Pinnacles National Park, San Benito County, California

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Above: The Ben Bacon Ranch Historic District looking north from an adjacent hilltop. The Bacon homestead is visible in the center left surrounded by oak woodland. The public campground lies just outside the lefthand margin of the photo. The Bacon-Butterfield Road meanders through the open fields to the north, passing the Butterfield homestead—just visible in the upper right corner—to end at the northern boundary of the park on Highway 25 at the foot of the distant hills. [NPS photo]

Introduction

The Ben Bacon Ranch Historic District comprises just over 350 acres in what is commonly known as the bottomlands of Pinnacles National Park. The historic district is largely associated with ranching and agricultural homesteads that existed in the area before it became a national monument.

Natural Setting

The historic district is the only flat area of any sizable extent within the otherwise rugged terrain of the 26,000-acre park. The bottomlands lie at the southern end of Bear Valley, located on the eastern side of the Gabilan Mountains of California, approximately 100 miles south of San Francisco. Roughly eight miles long, Bear Valley is drained by an ephemeral stream that becomes known as Sandy Creek where it enters the park and flows through the historic district. The name aptly describes the braided channel and broad, sandy flood plain, which resembles a desert wash. Several side canyons intersect the bottomlands at roughly right angles, the most prominent of which is McCabe Canyon, which joins the main valley from the northwest, opposite a public campground. Just south of the Bacon Ranch, Sandy Creek meets Chalone Creek, which flows westward through a narrow water gap in the Gabilan Mountains to join the Salinas River near Greenfield and then north to the ocean at Monterey Bay.

Lying inland of the Santa Lucia Range, which rises to more than 5,000 feet in places, the Gabilan Mountains and Pinnacles National Park are mostly shielded from the marine influence of the Pacific Ocean in a rain shadow that produces desert-like conditions most of the year. Average annual precipitation on the Bacon Ranch is eighteen inches. This is more than typical of true deserts, but the variability from one year to the next can be extreme, with some years seeing as much as thirty inches and others less than five. The climate is Mediterranean, with nearly all precipitation falling during the winter months, usually between December and March. Climate volatility is mitigated on the Bacon Ranch by the presence of artesian springs in McCabe Canyon which provide a

consistent source of water. Perennial spring water is one of the factors contributing to the unusually rich biotic abundance and species diversity of the park.

Prior to modern intervention, the Bacon Ranch would likely have been more mesic than presently, with deep-rooted perennial vegetation retaining and slowing the movement of annual precipitation and storing water locally within the soil. The earliest written description of the landscape—field notes from James E. Freeman's township survey in 1854—called the southern end of the bottomlands "swampy." Many settler accounts, though anecdotal in nature, recall the area being "wetter and greener" than it is now. Changes introduced both directly and indirectly by European and Euro-American settlement have altered the vegetal composition of the landscape, modifying hydrologic processes and rendering the environment more xeric in character even though there is little reason to believe that precipitation averages have changed very much over the last two centuries. The Bacon Ranch remains a savanna characterized by widely spaced valley oaks (*Quercus lobata*) and coast live oaks (*Quercus agrifolia*) in a prairie of grasses and mixed broad-leaf forbs. However, the extent and number of oaks is diminished from pre-settlement times due to a combination of culling and recruitment failure, while the composition of the prairie understory has shifted dramatically with the introduction and present dominance of invasive exotic species. [1] Two building clusters remain from the historic period of significance when the bottomlands were settled by American homesteaders. At the southern end of the district is the Ben Bacon homestead, comprising the Ben Bacon house, a large hay barn, and three smaller out buildings. To the north is the Butterfield homestead, comprising a hay barn, granary, and ruins of the former George Butterfield house. The historic district also contains archaeological evidence of at least three more homestead sites.

Acquisition

The Ben Bacon Ranch became part of Pinnacles National Monument (now Pinnacles National Park) in 2006. In 2000, a presidential proclamation had authorized expansion of the monument by approximately 11,000 acres.[2] Most of the additional lands were remote, chaparral-covered hills managed by the Bureau of Land Management and drew little attention when they were transferred by administrative action later that year. But approximately 2,000 acres comprised the privately-owned Pinnacles Ranch, a portion of the historic Ben Bacon Ranch that had survived relatively unchanged through multiple landowners following the death of the last Bacon resident in 1941. When this property was conveyed to the National Park Service after six years of negotiation, it would substantially alter both the character and purpose of the park by introducing new resources and operational responsibilities. Not only did the property bring to the monument its first extensive area of level ground and bottomlands habitat, it also brought new cultural resources that directly connected the monument, for the first time, with the homesteading and ranching history that characterized the rural communities surrounding it. At first, however, the most noticeable impact on the monument was the added responsibility of managing a large and very popular campground, located at the southern end of the historic Bacon Ranch.

Identification Efforts

While the new campground preoccupied administrative and maintenance staff, resource management staff focused their attention on identifying and assessing the significance of the natural and cultural resources the monument had acquired. One of the earliest formal identification efforts was a Cultural Landscape Inventory (CLI). This study, completed in 2009, documented the history of the former Pinnacles Ranch, establishing its significance and identifying contributing resources.[3] Although not listed on the National Register of Historic Places, the property was found eligible and will be listed eventually.The CLI established a historic district comprising most of the level bottomlands lying north of the campground and south of Highway 25, which marks the northern boundary of the monument. This Ben Bacon Ranch Historic District was found to be locally significant for its association with subsistence and small-scale commercial agriculture during the mid-to-late 1800s in San Benito County, California. It includes some of the earliest and most successful homesteads in Bear Valley, which reflect the full evolution of the early homestead economy from subsistence (or semi-subsistent) agriculture to small-scale market-oriented pastoralism. At the end of this evolutionary arc in the early decades of the twentieth century, the local economy began to stagnate, isolating Bear Valley from the larger patterns of development which characterized agricultural communities throughout most of the rest of California. The homesteads and associated landscape of the Historic District were all but abandoned by the time the last of the original homesteading generation—Ben Bacon and his wife Orea—had died

by 1941, the closing year of the period of significance. The CLI goes on to note that subsequent use of this land was relatively light, leaving most of the valley frozen in time at the moment of its economic marginalization. The integrity of the surviving landscape makes it possible to imagine and appreciate the historic period it represents at the culmination of its development. This is a rare opportunity in the history of California's agricultural landscapes, because in most of the state's rural districts, later development obliterated all traces of this earlier period along with its unique technologies and way of life.

Natural resource specialists understood

Above: Prescribed fire on the Bacon Ranch in 2009. [NPS photo]

both the value and immense challenge of the Bacon Ranch even before the conveyance of the property in 2006. The new lands would give the monument its first sizable example of prairie oak savanna habitat, but it would bring invasive exotic species as well, most notable of which was yellow star thistle (*Centaurea solstitialis*). This sharply spined, semi-woody plant is considered one of the most noxious rangeland weeds in the western United States, infesting over fifteen million acres, and is ranked as a species of highest concern by the California Invasive Plant Council.[4] Yellow star thistle can produce nearly continuous cover over hundreds of acres in established infestations and spreads rapidly, crowding out native species and livestock forage. Most of the Pinnacles bottomlands contained yellow star thistle, with approximately 140 acres comprising a dense monoculture. Treatment of this noxious weed would be the highest priority of natural resource managers for the immediate future.

Resource Management

Control of yellow star thistle on the bottomlands began in June 2009 when just over 140 acres were burned. This was the first prescribed fire at the monument in over a decade and the first to be conducted solely for habitat restoration. (Recognition

Above: Vegetation monitoring in restoration areas. Few native plants were able to become established beneath dense overstory of exotic species. [NPS photo]

Opposite: Looking north across the open fields at the center of the district toward the Butterfield homestead. As this photo illustrates, open grassland is a character-defining feature of the cultural landscape. [NPS photo]

of the value of prescribed fire in treating invasive species encouraged the monument to update its Fire Management Plan at that time to allow greater use of this methodology.) The fire successfully eliminated most of the existing growth of yellow star thistle but also stimulated latent seeds in the soil, producing an expected flush of new growth the following year. This was treated with a broadcast application of a selective herbicide.[5] A second herbicide application in 2011 effectively exhausted the seed bank, leaving the management area more than 99 percent free of yellow star thistle. What little remained could be managed through spot treatments and mechanical control. Lower density infestations still remained outside the formal management area where burning and broadcast herbicide applications were not practical—e.g., around the campground and historic buildings. These areas were treated manually by park staff over a longer period of time.

While control of yellow star thistle was the initial focus of natural resource managers, thought was already being given to the larger goal of re-establishing native flora to restore the original prairie habitat. More than a century of agricultural tilling and livestock grazing had extirpated most native species from the bottomlands. What survived in isolated pockets offered a compelling glimpse of the pre-settlement environment but was not enough to repopulate the landscape on its own. Knowing that active restoration efforts would be needed, natural resource managers had established demonstration plots as early as April 2009—even before the prescribed burn—in order to experiment with reseeding techniques using a selection of native perennial grasses harvested locally and grown out at a specialized farm.[6] These efforts looked forward to the second phase of bottomlands management, the restoration phase. This began in 2014 with tractor mowing to clear accumulated vegetation followed by seed drilling to propagate the native grasses, utilizing the method that had shown the greatest potential in the 2009 demonstration plots. Over the next three years, approximately sixty acres were treated in this way. Forbs were eventually added to the propagation mix as thinking evolved among resource managers about the appropriate composition of native prairie vegetation.[7]

The success of these efforts was constrained by continuing competition from exotic species, which still comprised the dominant cover over most of the management area. Ironically, other exotics had expanded following the control of yellow star thistle, which opened a niche

they were able to exploit. One of the most aggressive was summer mustard (***Hirschfeldia incana***), which overwhelms smaller or immature plants with its broad leaves and post-season woody detritus. In an effort to support the native propagules, preparatory treatments—e.g., soil scraping, and carefully timed herbicide applications—were tested in established plots. The results showed high initial success of native forbs in pre-treated plots. (Native grasses were much slower to become established.) After three years, however, exotic forbs and grasses reasserted dominance and threatened to smother native propagules under dense layers of accumulated thatch.

By 2017, natural resource managers recognized that another step was needed to ensure the viability of their prairie restoration efforts and began looking for an effective strategy to reduce thatch accumulation and allow native forbs to persist long enough to become permanently established. In late 2021, the park initiated a multi-year trial to introduce cattle through a lease arrangement with a local livestock operator. Twenty bred cattle were released in a fenced, fifteen acre section of the bottomlands over carefully timed and monitored intervals of the year in the expectation that the animals would help keep the exotic forbs and grasses in check through grazing while breaking down and trampling woody thatch. The results of this trial are still under study.

Cultural resource managers have largely supported these prairie restoration efforts, because the objectives of natural resource managers appeared to be compatible with the preservation of the cultural landscape. The CLI that established the historic significance of the Ben Bacon Ranch found that open, relatively uninterrupted grassland was one of the character-defining features of the landscape, at least in those areas where agriculture and livestock grazing had historically been practiced as opposed to riparian corridors or areas around building clusters where shade trees were preserved or even planted. Although grassland during the historic period may have consisted of cultivated wheat and barley or livestock forage, its appearance on a landscape scale was nonetheless compatible with the appearance of restored native grassland. Moreover, the introduction of exotic, semi-woody forbs, such as yellow star thistle and summer mustard, which post-dated the period of significance by several decades, was found to have diminished the integrity of the historic landscape. The removal of these invasive species by natural resource managers was therefore seen by cultural resource specialists as equivalent to preservation maintenance, even though that was hardly the intention of the vegetation ecologists who conducted the effort.

Natural and cultural resource managers discovered an even more interesting convergence of purpose in the characteristics of land use. The CLI had identified certain historic land use practices as character-defining features of the Bacon Ranch. These included cultivation of grasses (wheat and barley) and grazing of livestock. Both were practices in which natural resource managers were actively engaged. The recent experiment with cattle grazing to reduce exotic plant densities aligned the prairie restoration

Above: The southern end of the district within the Ben Bacon homestead cluster. The historic Bacon barn, visible to the left, was recently stabilized as part of a preservation training workshop. A more complete restoration of the structure is scheduled for 2028. [NPS photo]

efforts even more closely with historic preservation objectives. Only the shift in emphasis from grasses to forbs in native plant propagation was potentially inconsistent with the character of the cultural landscape, but this was as much a decision about means as ends—grasses took longer and were more difficult to establish than forbs. As long as the ultimate objective remained the restoration of a grassland environment—albeit comprised of a mix of native grasses and forbs—natural and cultural resource values remained essentially compatible.

Planning Objectives

In 2015, Pinnacles National Park embarked on a comprehensive east side planning effort to address ongoing and unresolved problems—such as crowding and traffic congestion—as well as future development opportunities in the most popular and heavily-visited area of the park. Lying at the entrance to the east side and possessing the largest expanse of open, level ground, the Ben Bacon Ranch Historic District played a central role in these discussions. Early proposals considered taking advantage of this readily accessible open space to provide more parking lots, more camp sites, and new facilities that the park's growing visitor population seemed to demand. After much discussion, however, new development was largely rejected in favor of preserving the quiet, open character of the cultural landscape. Not only were these qualities essential to conveying the historic significance of the Ben Bacon Ranch, they were recognized as valuable in their own right to the visitor experience and indispensable assets of the park.

When a new superintendent took up the East Side Plan in 2018 after a brief pause, she introduced a commitment to integrate cultural properties more robustly into the park's development proposals. Arguing that Pinnacles should be a "park for all people and all seasons," the superintendent sought to expand the range of visitor opportunities by providing more leisurely walks, picnic areas, and alternative activities that people of all ages and physical capacities could enjoy in addition to the arduous

backcountry hiking that represented the park's principal attraction. Opportunities to learn about the park's history and culture would provide new experiences that could be enjoyed by more people at all times of the year, even during the summer when triple-digit temperatures make hiking unpleasant or dangerous. These proposals had important implications for the Ben Bacon Ranch Historic District, because the Bacon Ranch offers some of the best opportunities in the park to provide such alternative experiences. In order to explore how these possibilities might be developed within the preservation constraints of the cultural landscape, the superintendent agreed to make a Cultural Landscape Report (CLR) part of the restarted East Side Plan. The specialists who were contracted in 2021 to conduct this study were asked to consider treatment recommendations for the Bacon Ranch that supported the superintendent's new priorities.[8]

The Ben Bacon Ranch CLR, completed in early 2023, recognized that varying levels and types of developmental intensity were appropriate for different areas, or zones, of the landscape.[9] The most intense development was recommended around the Ben Bacon homestead cluster at the southern end of the district where the majority of surviving historic structures is located, including the circa 1895 Ben Bacon house. Visitor use is heaviest here because of the proximity of the campground. Development would be visitor-oriented, focusing on the interpretation of homestead-era history. Salient elements would include restoration of historic structures, installation of interpretive signage, and construction of an ABA-compliant interpretive trail. Scheduled public events might also be sited here. Development intensity would diminish moving north through the landscape. This is consistent with distance from the campground but also with the availability of shade, which becomes increasingly difficult to find after leaving the oak woodland around the Bacon homestead. The most intensive development in this middle zone would be a loop trail through the center of the bottomlands to provide visitors a longer but still relatively easy walk on level grade. Visitors would be able to experience the quiet, open character of the historic agricultural landscape and encounter the ongoing prairie restoration project, though interpretive signage would be avoided in this lower-intensity zone. More intrepid visitors would be able to continue north along a historic ranch road to the farther boundary of the park if they liked, but the northern half of the historic district would remain oriented primarily toward park administrative use, with prairie restoration efforts predominating. At the center of this northern zone, the historic Butterfield homestead cluster would be restored for visitor interpretation but used primarily for administrative purposes—e.g., for supporting the park's stock animals, its current use. This overall developmental scheme for the Ben Bacon Ranch would preserve the essential character of the cultural landscape and allow compatible administrative uses—such as prairie restoration—to continue while realizing the superintendent's goal of expanding visitor opportunities to meet the needs of a growing and increasingly diverse visitor population.

As Pinnacles National Park moves forward into the twenty-first century, with all of the challenges that this future brings, it has successfully preserved the essential character of a nineteenth-century landscape in spite of growing developmental pressures. This is, and should continue to be, a priority of the park so that the experience of landscapes like this, and not just their memory, can remain for the enjoyment and edification of park visitors. Restoration of the native prairie grassland is an integral part of these preservation efforts, as cultural resource managers at Pinnacles acknowledge and actively support. Making both the cultural and natural resources of this landscape more accessible and interpreting their significance by realizing the superintendent's idea of a "park for all people and all seasons" represents the next stage in the evolution of the Ben Bacon Ranch. As of this writing, preservation maintenance has already begun on some of the contributing structures within the historic district, and the final year of the initial cattle grazing trial is wrapping up for the prairie restoration project. How the Bacon Ranch evolves from this point remains to be seen, but its future now rests on a foundation of careful thought and planning.

Endnotes.

1 Most of this information comes from the author's research in "Environmental History of the Pinnacles National Park Bottomlands," written as a supplemental appendix for Brent Johnson, et al., "Exploring the Traditional Use of Fire in the Coastal Mountains of Central California," JFSP #10-1-09-3, Joint Fire Science Program, 2013. [Copy available at Pinnacles National Park, Paicines, California.]

2 P.R. No. 7266, 11 January 2000 (65 F.R. 2831-32).

3 Cortney Cain, Jason Biscombe, and Timothy Babalis, Ben Bacon Ranch Historic District: Cultural Landscape Inventory (Oakland, CA: National Park Service, Pacific West Regional Office, 2009).

4 "Habitat Restoration: Environmental Assessement, Including an Update to the Fire Management Plan," Pinnacles National Monument, National Park Service, December 2009, p. 107; and Innes, Robin J., and Kris Zouhar, "Centaurea solstitialis, Yellow Star Thistle," in Fire Effects Information System, [online], USDA, US Forest Service, Rocky Mountain Research Station, Fire Sciences Library, 2021.

5 Milestone (aminopyralid).

6 Hedgerow Farms in Davis, CA. The perennial grasses were Melica californica, Poa secunda, and Nasella pulchra. They were grown out over three acres, providing a substantial supply of locally endemic seed for future restoration efforts.

7 Forbs that were identified for seed collection included Lupinus bicolor, Lotus purshianus, Delphinium spp., Lasthenia californica, Meconella linearis, Platystemon californica, Eschscholzia californica, and Achyrachaena mollis.

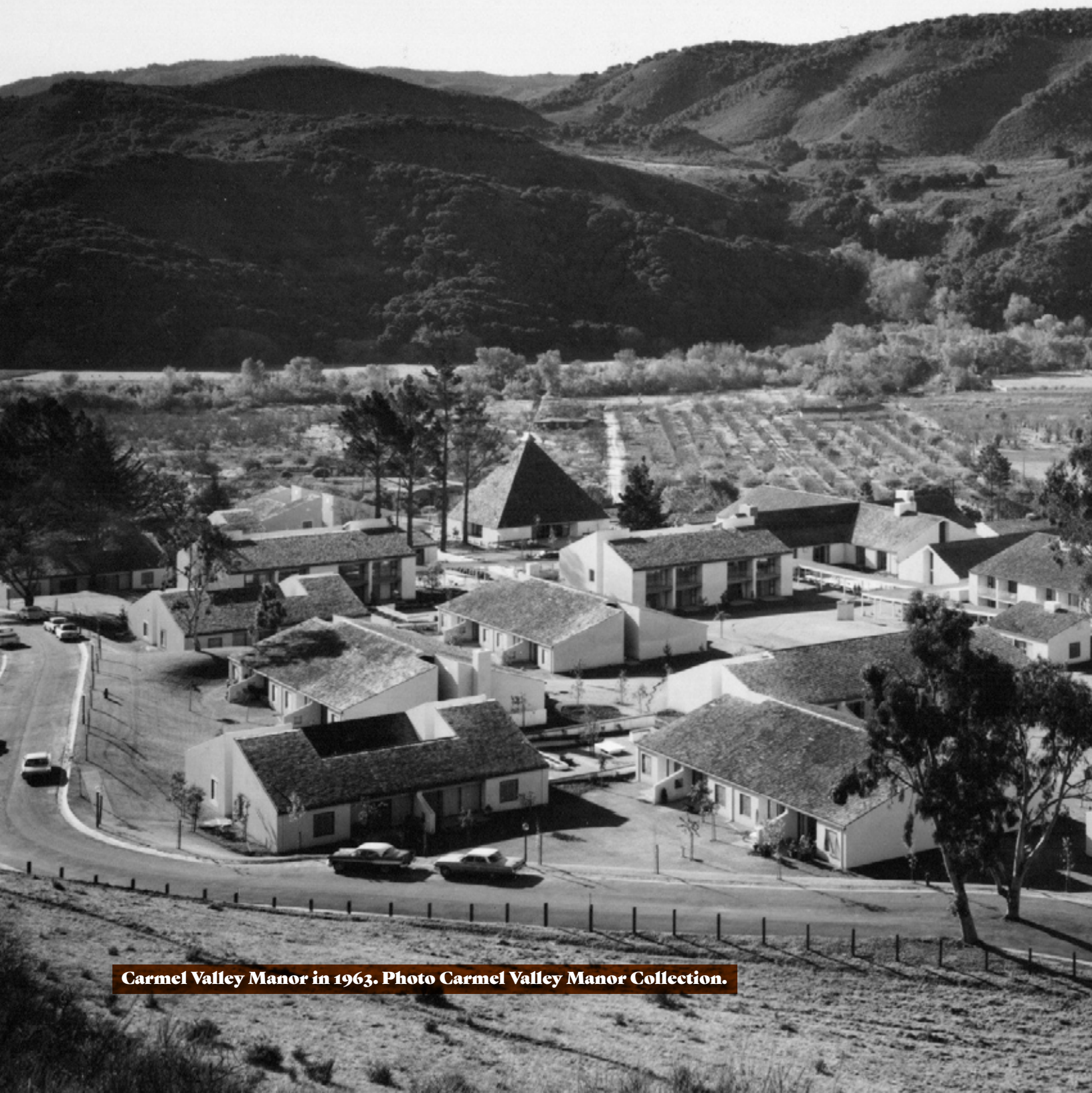
8 The CLR team was from MIG, Inc., working under subcontract to FFA Architecture and Interiors, Inc. of Portland, OR.

9 Gretchen Hilyard Boyce, Eleanor Cox, and Rachel Edmonds, Ben Bacon Ranch Historic District: Cultural Landscape Report (Paicines, CA: Pinnacles National Park, 2023).

Carmel Valley Manor

A Landscape & Garden History

David Laws



Carmel Valley Manor in 1963. Photo Carmel Valley Manor Collection.

"I pursued my way, soon crossing a bridge over a wide, shallow stream called the Carmel. A beautiful valley opens here inland. I had long wished to explore it, as well as to try my flies on the river."

—J. Smeaton Chase,
California Coast Trails

If Mr. Chase had detoured into this "beautiful valley" on his horseback adventure from Mexico to Oregon in 1911, he would have traversed a pastoral landscape coveted for thousands of years by the Rumsen Ohlone people for its bountiful acorns, berries, grasses, fish and game. By his time, the rich riparian lands lining the Carmel River had already passed through generations of owners from successive invasions by Spanish, Mexican, and American colonists. Vast Mexican land grants made in the mid-1800s had been subdivided into smaller, family-owned lots transitioning from cattle and dairy ranching into pear orchards and produce to serve the growing population and visitors to the Monterey Peninsula.

John Steinbeck observed in *Travels with Charley* that by the 1950s, the valley was filling up with newcomers, so "where once we could shoot a thirty-thirty in any direction. Now, you couldn't shoot a marble knuckles down without hitting a foreigner." Today, a few plots remain in organic farming, but the orchards and dairies are gone, replaced by residential estates, retirement homes, wineries, and upscale resorts. And the diversion of river water to serve these communities has decimated the fishing.

But for those lucky enough to live at Carmel Valley Manor, the setting, nestled between the rugged arms of the Santa Lucia Mountains and the Ventana Wilderness, is still extraordinarily beautiful. The "Manor" is a senior residential community located on twenty-eight acres of chaparral and oak savanna on a south-facing terrace overlooking the flood plain of the Carmel River. Situated five miles inland, in the sweet spot between the cool summer coastal fog belt and the temperature extremes further inland, the site enjoys a temperate Mediterranean climate with an average annual rainfall of twenty inches and average low and high temperatures of forty-five and seventy-one degrees F, respectively. The landscape and gardens have evolved over the centuries from a hunting ground for indigenous people through service as a working ranch and a privileged playground for the wealthy to an arboretum for horticultural species from across the globe.

Pre-European History of Carmel Valley

The Monterey Peninsula lies on the granitic Salinian Block, a portion of the California Coast Range sliced from the southern Sierra Nevada range and thrust north by the tectonic forces of the San Andreas Fault. Over millennia, uplift followed by subsidence under the ocean has yielded a complex geology and terrain. The present Carmel Valley is said to have been carved by a great river that was later rerouted to empty into Monterey Bay.

Indigenous people have lived in the area for more than 10,000 years. Archeological findings indicate that permanent human settlements existed in Carmel Valley 2,000 years ago. When Spanish mariner Sebastian Vizcaino visited Monterey Bay in 1602, 100 to 150 Rumsen-speaking people occupied the valley. Their village of Tucutnut stood on the present-day Quail Golf Course near the confluence of Potrero Creek with the Carmel River.[1] They lived by fishing, hunting, and harvesting acorns, berries, bulbs, and nuts and used fire to enhance the yield of nutritious seeds from grasses. Nearby Garland Ranch Park contains bedrock mortars created by centuries of grinding acorns for bread. By 1771, the Rumsen way of life began to wane as their lands were seized by the church following the establishment of Mission Carmel that same year.

The Rumsen used many plant species that grow on the Manor's terrace slopes for food, medicine, and tools. Typical examples include the flowers and leaves of the California Poppy (*Eschscholzia californica*) that were eaten and their mashed stems and roots used for medicine, especially toothache. Coast Live Oak (*Quercus agrifolia*) acorns were leached and ground for soup and bread, and the bark for medicine. Coyote Brush (*Baccharis pilularis* ssp. *Consanguinea*) crushed leaves made tea for a general remedy, and the twigs used for fire drills. Poison oak (*Toxicodendron diversilobum*) leaves protected food baking in earthenware ovens, and the stems were prized for basketry warp.[2]

The Early American Era

After the Mexican government dissolved the mission system in 1833, the former Carmel Mission lands in the valley were sold or given as grants called ranchos.[3] Rancho Palo Escrito in mid-valley passed through several hands before being purchased in 1848 by James Meadows (1817–1902), an English sailor who jumped ship in Monterey and found work as a vaquero on Rancho El Sur. Meadows owned 4,592 acres stretching from the ridge line down to the Carmel River, known as the Meadows Tract.[4] He married Loretta Onesimo de Peralta, a widow of Rumsen lineage, and built an adobe home on the property. They raised four sons and a daughter, Isabel (also known as Ysabel and Isabelle), who, as one of the last speakers of the Rumsen language, worked with ethnologist J. P. Harrington at the Smithsonian Institution in the 1930s to document her tribe's history: a record that has proven

Left: Rumsen grinding rocks in Garland Ranch Park. Photo: David A. Laws

Right: Diseño del Rancho James Meadows: Calif. A sketch drawn circa 1859 to support Meadows's claim to the rancho lands. Source: Bancroft Library

invaluable in the preservation and revitalization of the Rumsen Ohlone tribal community culture.[5]

James Meadows operated a dairy and cattle ranch and a flour grist mill powered by mules. In 1859, he donated land for Carmelo School, the valley's first. That building was replaced in 1916 by a larger structure that still stands beside the modern fire station. After his death, the ranch was partitioned into multiple lots, which were divided between his surviving children in 1905. The Manor is located on Lots 13A and B of the partition, which were deeded to Thomas Meadows. The steep, chaparral-covered backdrop was described as "Mountainous Grazing Land."[6]

The Johnson and Sullivan Years

Architect Reginald D. Johnson (1882-1952) was an early designer of Mediterranean-style houses for wealthy clients and public buildings in Southern California, including the Biltmore Hotel and the Post Office in Santa Barbara. His office applied for over 100 building permits in Pasadena alone between 1912 and 1921. Many of his large houses still stand in the Hope Ranch, Montecito, and Pasadena areas. After 1935, as a social activist and public housing expert, he turned his attention to projects for people of more modest means, including the Village Green (formerly called Baldwin Hills Village).

In the mid-1920s, Johnson purchased the current Manor site and built a residence in the Monterey-Colonial style, which he described as the perfect combination of atmosphere and charm for California's climate and landscape, together with a barn, tack house, and horse facilities.[7] He often retreated to this home "for relaxation from his pressing professional life."[8] William W. Wurster, the founding dean of U. C. Berkeley's School of Architecture, was a frequent visitor.[9] Although Johnson worked with notable landscape architects in the south, including Katherine Bashford, there is no evidence that he developed this ranch property as anything more formal than an equestrian retreat.

Philanthropist Noël Sullivan (1890–1956) purchased the Johnson property and house in 1936. Scion of a wealthy and distinguished family, his uncle was U.S. Senator and Mayor James Phelan of San Francisco, he attended Jesuit colleges, where he developed an interest in music. In 1934, he rented a cottage near the ocean in Carmel-by-the-Sea, where he met notables from the artistic world and took an active role in early Bach Festivals.[10] A contributor to humanist causes, Sullivan befriended African-American artists, including author, poet, and social activist Langston Hughes. After threats of racist violence aimed at Hughes, Sullivan invited him to his new Carmel Valley estate in 1939, "where his guests of all political persuasions could visit unmolested."[11] Here, Hughes completed writing his autobiography *The Big Sea* (1940) free from stress and strain among the "fragrant flowers and shrubs and green grass." While he enjoyed the refuge as "a little Heaven," he was not so thrilled at having to dress for dinner every evening.[12]

Sullivan named the property "Hollow Hills Farm" after a verse sung by Etain,

Above: Carmelo School in 1916. The Manor is on the hill beyond the fence. Photo: Monterey County Free Library Local History Collection.

Left: The Reginald Johnson House circa 1939. Photo: Carmel Valley Manor Collection.

Above: Mid-1920s view of Carmel Valley at Schulte Road from Johnson's property. Photo: Courtesy Monterey Public Library, California History Room Archives.

Opposite: Johnson's horse barn and windmill. Photo by George Seideneck courtesy UCSC Special Collections and Archives.

an immortal fairy maiden, in the opera *The Immortal Hour* by Scottish poet William Sharp under the pseudonym Fiona McCleod. Hollow hills are the habitations of the little people.[13]

> How beautiful they are,
> The lordly ones
> Who dwell in the hills.
> In the hollow hills.
>
> They have faces like flowers
> And their breath is wind
> That blows over grass
> Filled with dewy clover.

The house had a dozen main rooms, including six bedrooms and five bathrooms. A parlor, two dining rooms, and a servant's wing were downstairs. A swimming pool and gardens with "clear air and fragrance of flowers and trees" encouraged relaxation.[14] In 1946, Sullivan added a two-story music room with an acoustically designed pitched wooden roof by architect Jon Konigshofer. Here, together with his lifelong companion Canadian author Leander (Lee) Crowe, he entertained visitors from the music and movie worlds, including Marion Anderson, Paul Robeson, Duke Ellington, Cole Porter, Yehudi Menuhin, Isaac Stern, Pablo Casals, Arthur Rubenstein, Douglas Fairbanks, Joan Fontaine, Greer Garson, and Charlie Chaplin. Author Arthur Miller and poet Robinson Jeffers were among the guests from the local community. [15]

Other hints at the farm's landscaping include references to buffet lunches on "wide lawns" for Bach Festival participants. One guest commented on the forest of trees: "Poor dear Noël, he plants a tree but never thinks it will grow. When it does, he cannot bear to cut it down."[16] The driveway entrance featured gates and fencing built with bronze-plated cast-iron elevator grills from his uncle's Phelan Building on Market Street, San Francisco.[17] It remains in place today.

Hollow Hills allowed Sullivan to indulge his love of animals. A guest dubbed his menagerie of cats, dogs, rare birds, and exotic deer "Noël's Ark."[18] Images of farm

livestock by Carmel Valley artist and photographer George Seideneck circa 1948 include cows, goats, and sheep.

The Sullivan family were devoted Roman Catholics. With stones from the Carmel River bed, foreman Bill Scott built a small stone chapel on the east perimeter road dedicated by Noël to "Our Lady of Carmel Valley" in 1946. Tiles on each side of the entry are inscribed with verses from "The Canticle of the Sun," a poem by St. Francis of Assisi. Today, Hollow Hills Chapel serves Manor residents of all faiths. His sister, Mother Ada (Sullivan), a member of the Santa Clara community, gave her inheritance to build the Carmelite monastery on Highway One south of Carmel in 1931.

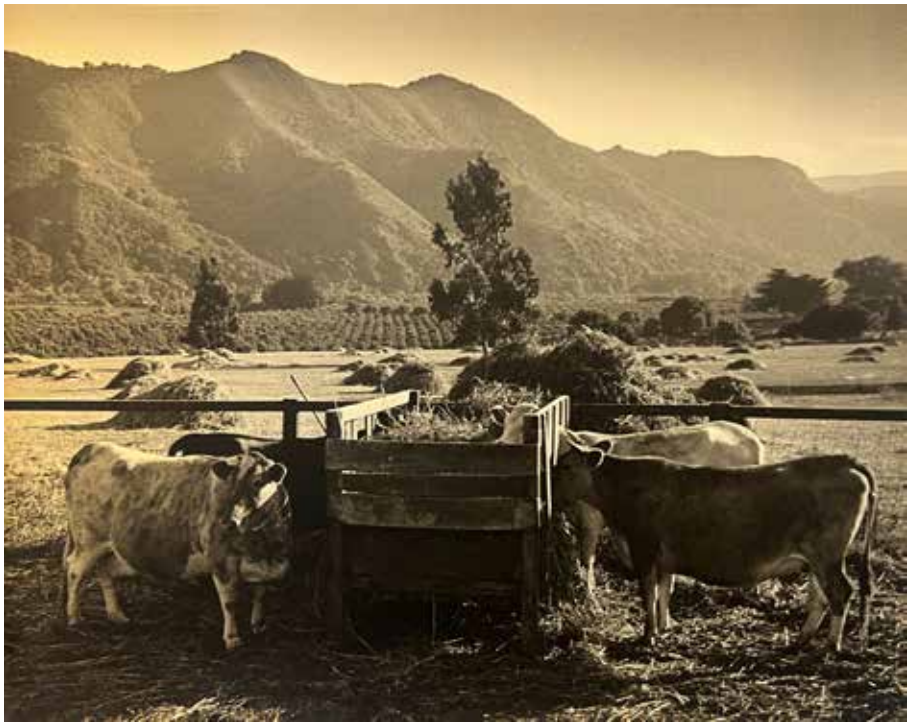
Noël Sullivan died at the Bohemian Club in San Francisco in 1956. He left Hollow Hills to his nieces and a nephew, who used the farm as a holiday home.

The Founding of Carmel Valley Manor

Seeking a site to build a retirement home for seniors, Dr. William Pratt, Superintendent of the Northern California Conference of Congregational churches, visited the farm in 1960. He was captivated by "the spell of the trees, the lift of the land, and the mood of serenity, which wrapped buildings, barns, livestock, and gardens."[19] In 1961, with Dr. Pratt as Administrative Director, a nonprofit corporation, d.b.a. Carmel Valley Manor, purchased the land for $125,000.

The San Francisco architectural firm of Skidmore, Owings, and Merrill designed a campus to take advantage of the site's topography and views. Plans to retain the Johnson House as a library, craft room, and guest facility were dashed when the building burned in a fire in January 1962. The contractor, Williams and Burrows, removed the debris and broke ground in April 1962.

Dr. and Mrs. Pratt moved into a cottage on the property known as the "Adobe" and lived there while construction proceeded. He reported, "The old Sullivan estate possesses hundreds of trees, many of them splendid specimens that will be the basis for further landscaping. Some trees are past their prime or are not suitable. Our landscape architects



Opposite top left: Charles Chaplin, Charles Erskine Scott Wood, Sara Bard Field, and Noël Sullivan at Hollow Hills Farm prior to 1944. Source: The Bancroft Library Portrait Collection.

Opposite top right: Poplar-lined entrance to Hollow Hills Farm in the fall ca. 1948–1949. Photo by George Seideneck courtesy UCSC Special Collections and Archives.

Opposite bottom: Goats browse in the pen alongside the entrance road. Pear orchards fill the valley below. Photo by George Seideneck courtesy UCSC Special Collections and Archives.

Left: Sheep graze above the caretaker's cottage. Photo by George Seideneck courtesy UCSC Special Collections and Archives.

Bottom: Cows feed on the pasture that is today's Manor site. Photo by George Seideneck courtesy UCSC Special Collections and Archives.

have selected the most aesthetic and useful trees. These have been flagged so that the grading contractor will guard them against damage. Of interest in this regard is the landscape plan, which calls for the planting of 584 new trees."[20]

In October 1963, the first residents moved into a campus of 170 residential units in 20 apartment-style buildings and 10 standalone cottages with a dining hall and lounge, a health center, and an auditorium meeting house. According to Nathaniel A. Owings, the design was inspired by the historical adobe architecture of Monterey. Its bold, white, geometric structures are "reminiscent of the cool, clear shapes of a Mediterranean village … combined with a crisp feeling of something very modern. Forms are mostly felt through the shadows they cast, and the almost stark, almost sheer lines of the galleries and roofs send strong shadows to the ground. … We hoped that

Top left: Hollow Hills Chapel in the shadow of the Manor's largest Valley oak (Quercus lobata). Photo: David A. Laws.

Top right: Mrs. Elizabeth Swaney and a prospective resident surveyed the site in 1960. Photo: Carmel Valley Manor Collection.

Bottom: Architect's sketch of one and two-story building styles. Photo: Carmel Valley Manor Collection.

there would be nothing faddish or dated about the place."[21]

Project designer John Woodbridge, who later led the redevelopment of Pennsylvania Avenue in Washington, D.C., said, "The beauty of the site and density of building on it, as well as the program, called for a quiet architecture of simple forms in which individual buildings would appear as parts of the group, and the group would be constantly opening to views of the surrounding valley and hills."[22]

"The roof forms of the Manor are typically gables with their non-essential parts cut away to admit daylight to the entry courts. … The simple pyramidal roof of the Meeting House is intended as the fulfillment of all the other 'incomplete' roofs. … it is a symbol of the oneness of the community, expressed in one of the simplest of all geometric forms." [23]

The American Institute of Architects honored the design with an Award of Merit in 1964. The commendation described the development as "A refreshing accomplishment, as beautiful and human in scale as a medieval village. The buildings, displaying perfect harmony with the beautiful setting, provide a relaxing and intriguing atmosphere for retirement."

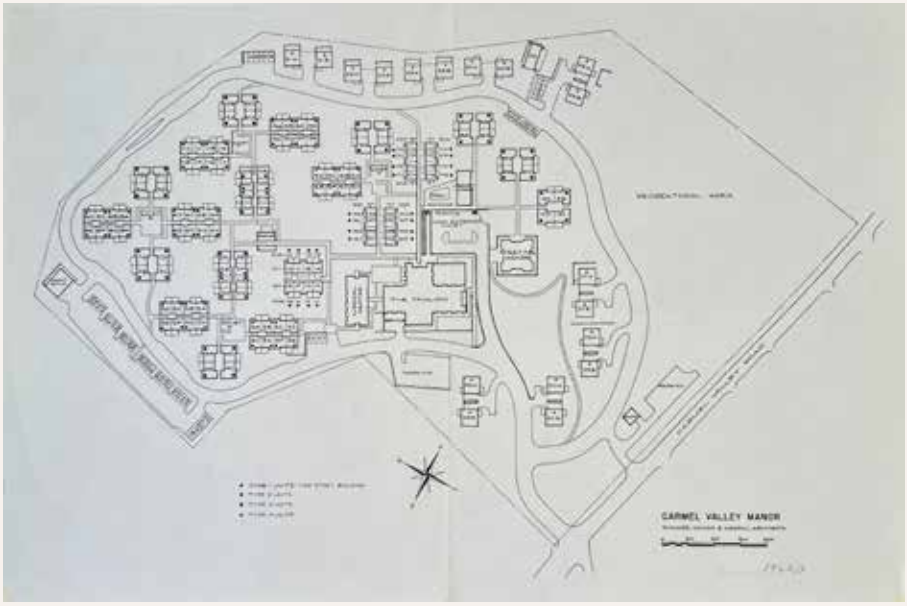
In a cover article, *Progressive Architecture* magazine said the firm "has created a village environment of remarkable visual interest. A system of circulation routes passing alternately through buildings and plazas exposes residents to views enlivened by subtle variations in architectural forms and landscape design."[24]

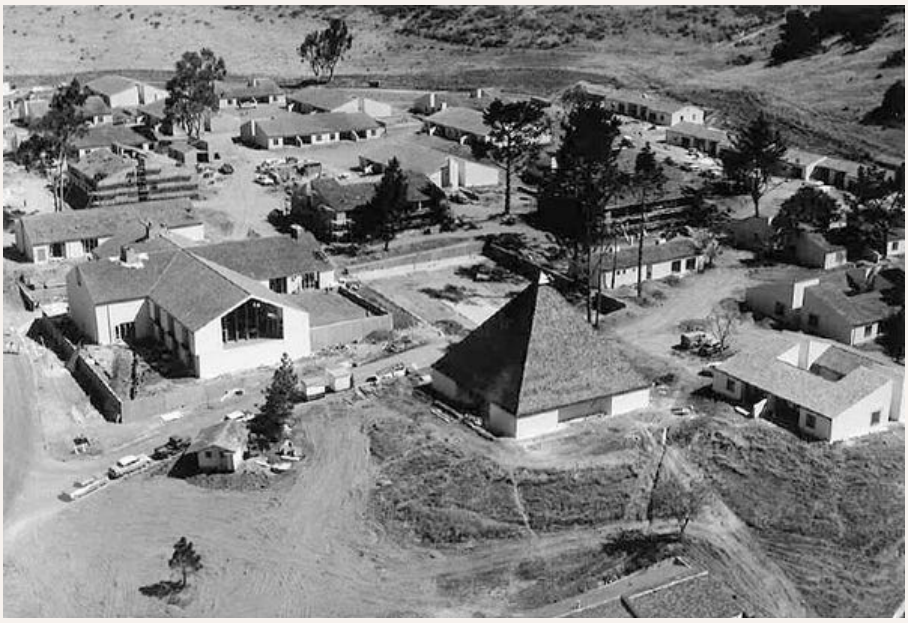
Retired architect Russell Haisley, who has lived at the Manor for nearly twenty years, feels that "It has worn well. It's timeless."

The Manor Gardens: The First 40 Years

Founded in Watertown, Massachusetts, Sasaki, Walker, and Associates opened a regional office in San Francisco in 1959 and were engaged as landscape consultants shortly after completing the Foothill College campus in Los Altos Hills.

Native evergreen Coast live oak and





Top: Skidmore, Owings, and Merrill site plan circa 1962–63. Photo: Carmel Valley Manor Collection.

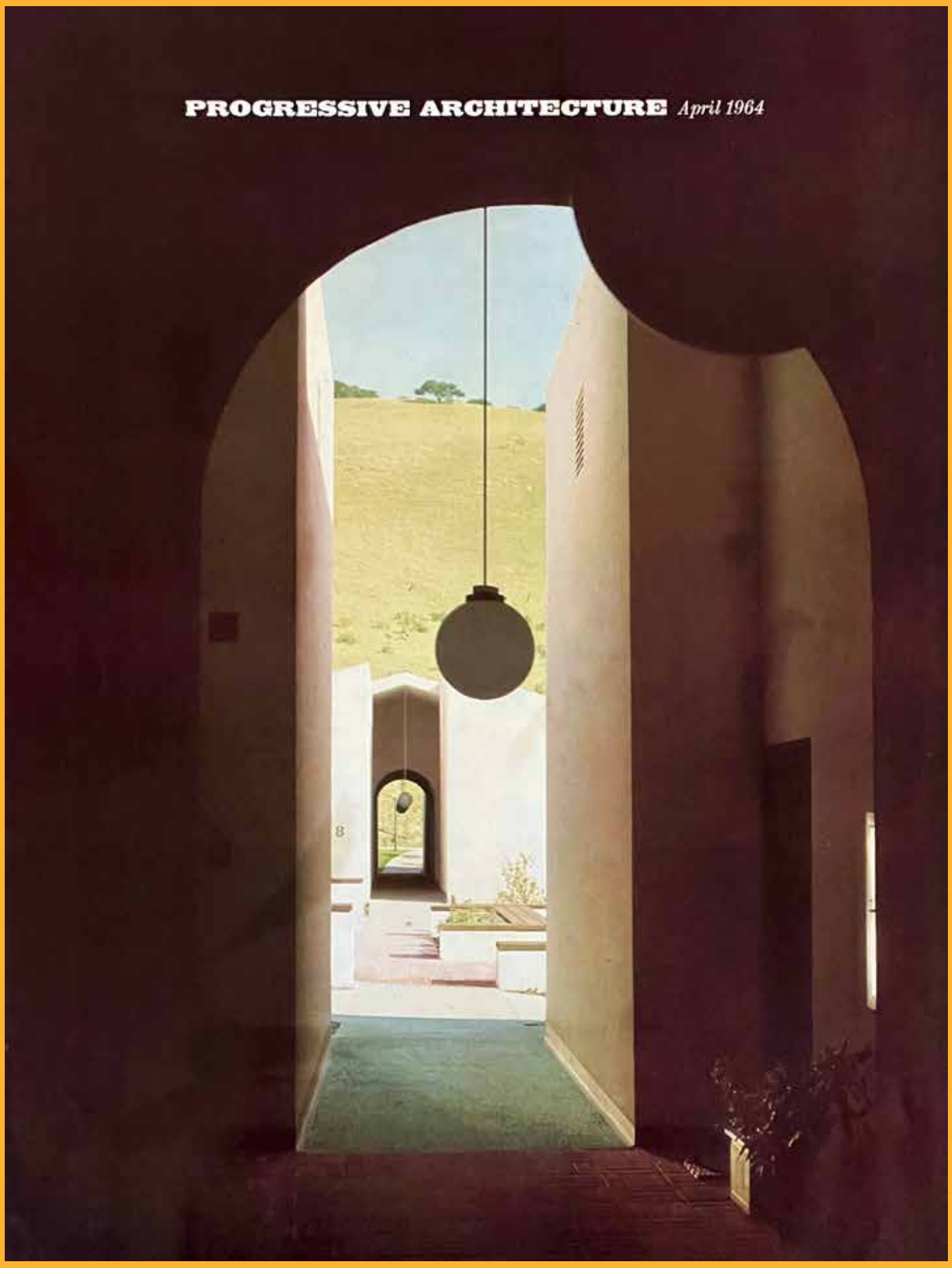
Middle: Construction begins mid-1962. Photo: Carmel Valley Manor Collection.

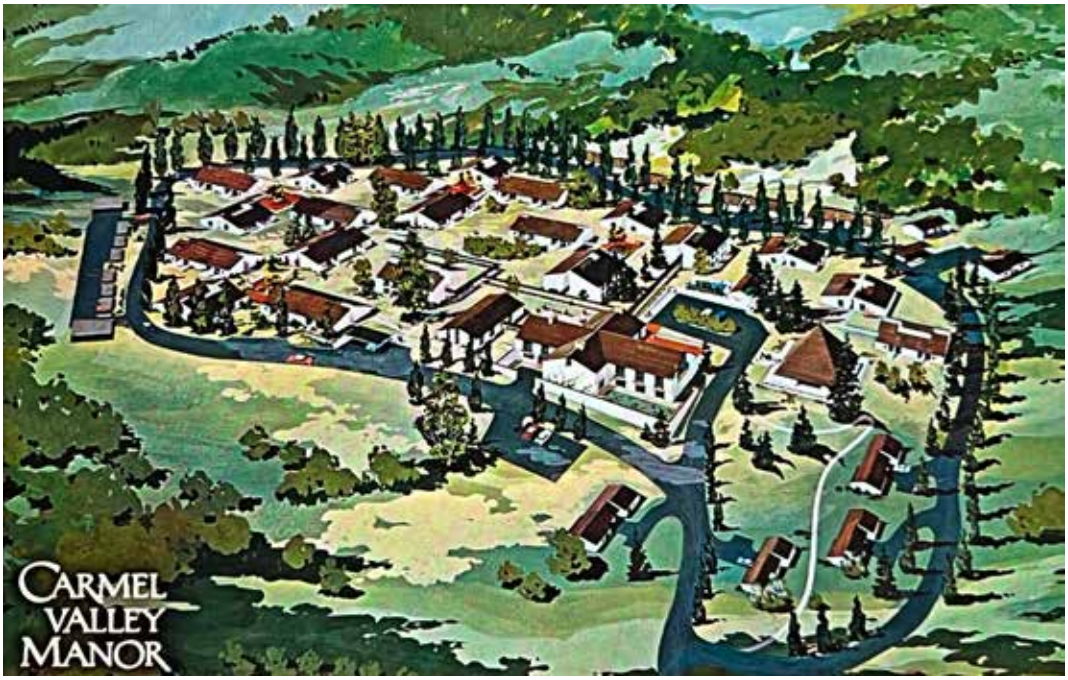
Bottom: Construction in process, early 1963. Photo: Carmel Valley Manor Collection.

Above: Building 16 is a typical single-story structure. Photo: Carmel Valley Manor Collection.

Right: Buildings 14 and 17 are two-story. Photo: Carmel Valley Manor Collection.

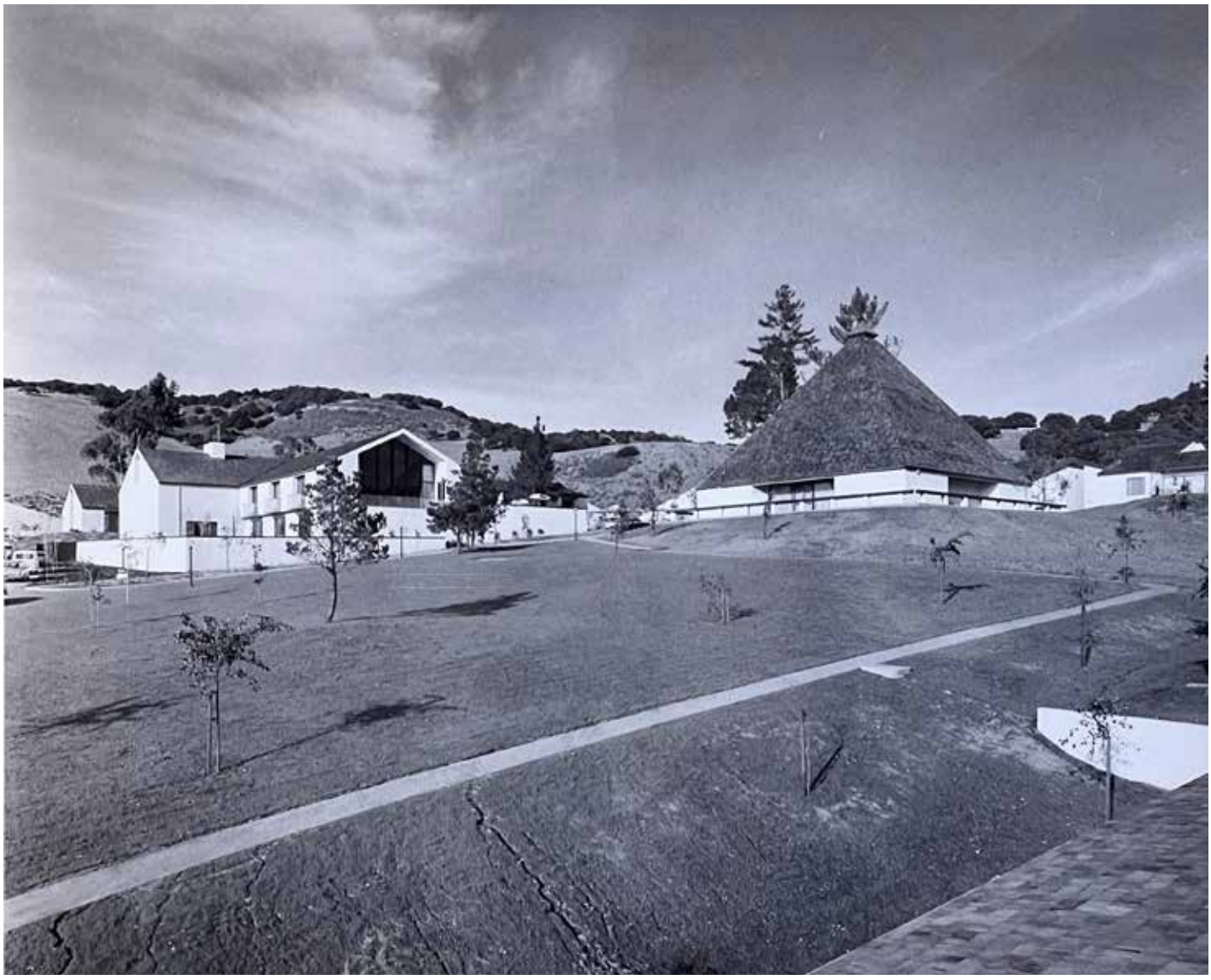
Opposite: *Progressive Architecture* cover photo by Morley Baer featured Building 8 viewed from the arched corridor of Building 6. Photo: Carmel Valley Manor Collection.


PROGRESSIVE ARCHITECTURE April 1964



Right: A postcard of an artist's conception of the site. Photo: Carmel Valley Manor Collection.

Below: Newly planted trees on the grass-covered slope below the Meeting House, circa 1963. Photo: Carmel Valley Manor Collection.



Monterey pine (*Pinus radiata*) screened the site from Carmel Valley Road. Lombardy poplar (*Populus nigra* 'Italica') lined the east perimeter road but were removed and replaced by American sweetgum (*Liquidambar styraciflua* 'Cherokee') after their roots undermined the road.

The Manor's predominant landscaping feature, nearly four acres of irrigated lawn, was designed to flow around the building clusters and a scattering of heritage and newly planted trees.

Sixteen of the residential buildings are centered in groups of four around courtyards designed to serve as community meeting spaces. The sheltered courtyards protected annual and delicate plantings. Colorful bedding flowers most frequently noted in contemporary newsletters and photographs include gazanias, marigolds, petunias, and viola hybrid pansies. More than a dozen camellia and rhododendron shrub cultivars were selected for foundation plantings.

Early in the gardens' development, fragrant wisteria vines, including American (*W. frutescent*), Chinese (*W. sinensis*), and Japanese (*W. floribunda*) species, were trained along the sides of the covered walkways. Sixty years later, their now woody twining trunks continue as one of the garden's most distinctive and beloved springtime features.

Beyond the professionally landscaped common areas, each of the ground-level units includes an individual patio, planting beds, and screening maintained by the residents. Head gardener Ted Gilles brought forty examples from local nurseries to demonstrate plants recommended for the area. Most residents set about beautifying their new gardens.[25] One of the more memorable horticultural anecdotes involves the removal of a stand of opium poppies near the chapel after a visit from a Federal narcotics agent.[26]

A resident's cutting garden on the perimeter road supplied flowers for the chapel and dining room. Ted Gilles also arranged for a neighboring field to be prepared for amateur gardeners to cultivate corn, tomatoes, and cucumbers, as well as flowers.

The Gordon Dill Era

Gordon Dill was born in King City, California, and spent his early years in Salinas. After graduating from California Polytechnic State University, San Luis Obispo, with a degree in landscape architecture, he worked on projects in Beverly Hills and Hollywood for Charles Hoffman. On returning to Monterey County, he collaborated with a partner on numerous landscaping projects in the area for more than fifteen years. In 1998, the Carmel Plaza shopping center owner hired Gordon to create and maintain a year-round

Above left: Grass berm with White ironbark (Eucalyptus leucoxylon) between Buildings 13 and 16. Photo: Carmel Valley Manor Collection.

Above right: Above right: Evergreen pear (Pyrus kawakamii) are planted in the lawn. Photo: Carmel Valley Manor Collection.

Above: Chinese Wisteria sinensis 'Cooke's Special' on the walkway near the putting green. Photo: Carmel Valley Manor Collection.

Opposite top: Residents at work in the cutting garden in July 1968. Photo: Carmel Valley Manor Collection.

Opposite bottom: Turf-Value Analysis plan by Bellinger, Foster, and Steinmetz, July 20, 2009. Photo: David A. Laws.

showplace garden, for which he received an award from the Garden Club of America.

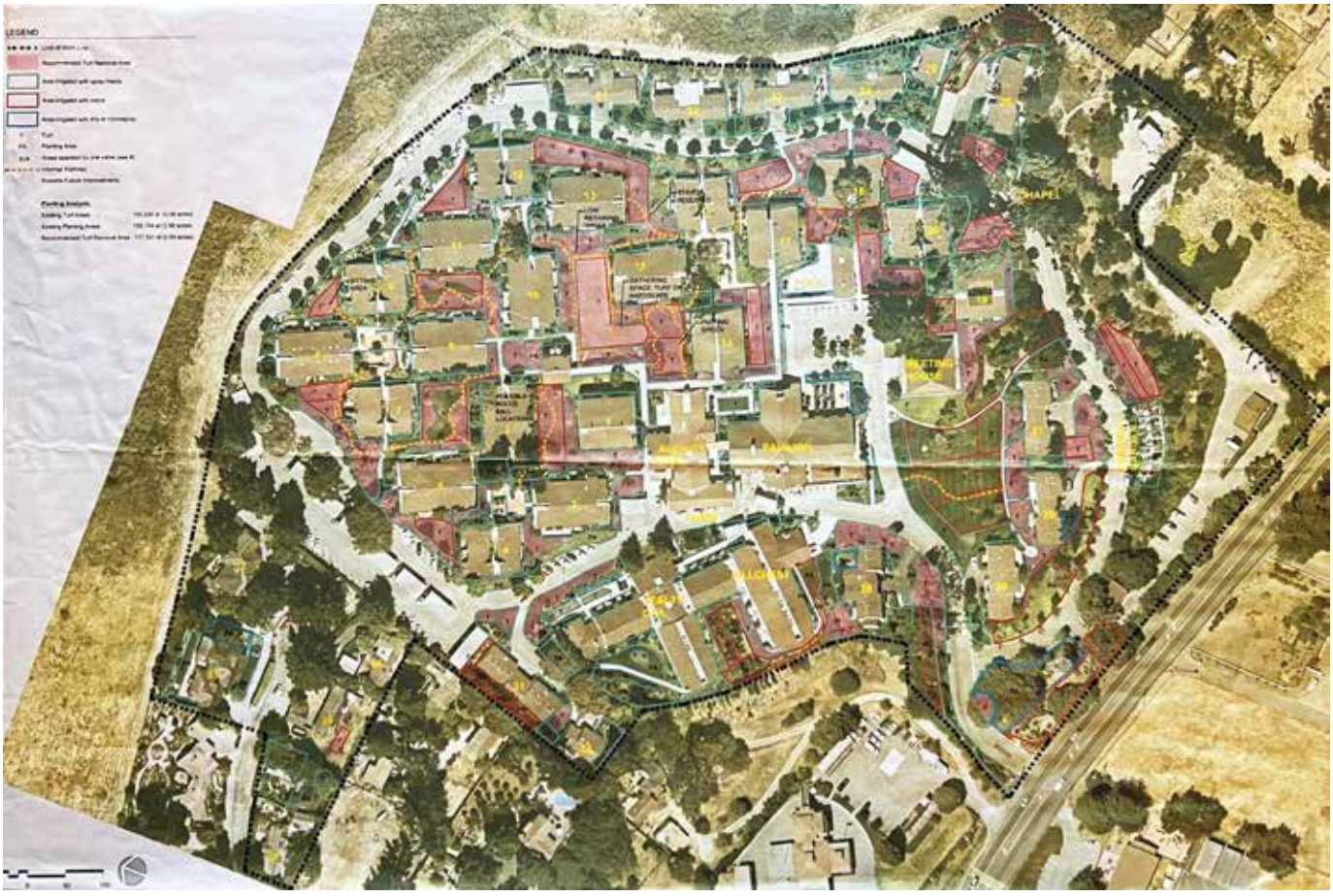
In 2001, Manor CEO Jim Valentine hired Gordon as Grounds Supervisor. On arrival, his initial task was to build the morale of a crew of five gardeners who remained after six of their peers were fired for illegal behavior. He gained their trust by helping them learn English, assisting with family and documentation issues, and teaching skills besides just cutting hedges and lawns, such as irrigation installation. They responded with an extraordinary dedication to detail and personal responsibility for their assigned areas that continue today.

With water bills exceeding $60,000 per year in the early 2000s, reducing consumption became a priority. In 2004, Gordon developed a plan to replace the 3.56 acres of irrigated turf with an eclectic mix of low-water-consuming natives and species from other Mediterranean climate zones. Rotor and spray head sprinklers were exchanged for drip and microspray irrigation as required to establish the new plantings. A putting green and croquet court was resurfaced with artificial turf.

The initial reaction to these proposed changes was largely negative. Some of the more outspoken residents were verbally abusive and, sometimes, threatening. However, the plan was implemented over several years with strong support from the CEO. Today, about 150 varieties of trees and 300 varieties of woody shrubs are presented in an arboretum-style landscape with dry stone creek beds and seventy-five varieties of ground cover.[27] No areas of lawn remain.

Gordon created unique designs matching the location, soil, and exposure for gardens in each of the five major zones of the campus. The fact that residents living around all four sides of some of the gardens expected an equally attractive view presented some difficult design challenges. Following is an example of his notes for a bed around a residence overlooking the entrance driveway. The plant list for this area comprised twenty-three species; twenty-five percent of them are native Californians, including arctostaphylos, ceanothus, and ribes varietals.

"Prior to the renovation, this area was lawn with some hedges around the building. This landscape needed to provide some screening from the road, a sound barrier, and visual interest since guests would see this area when they come up the road. Low water, less maintenance, and gopher and rabbit control were the top issues in this area. So, in planting, I placed the trees and large shrubs first to provide sound barriers and screening, and then I needed color with the lavatera and ceanothus. The area to the right of the driveway has a hardpan so when it rains, the water flows twelve inches under the surface and builds up at the driveway. So, in wet winters, the native plants would die, so I replanted with verbena homestead purple, which seems to like the wet-to-dry conditions and tolerates the minimal drainage. I added *Euonymus chollipo*, which has yellow foliage for visual interest, so when


LEGEND
CHAPEL

Above: One of the last areas of turf to be removed in 2013. Photo: Gordon Dill.

Opposite: Poppy meadow near the Meeting House. Photo: David A. Laws

the ceanothus is in bloom, there is a nice color combination. I kept the planting along the road lower for better visibility for the drivers."[28]

As the plantings took hold and their shapes, colors, and textures emerged, resistance to the changes mellowed, and most residents began to appreciate the new look. They especially enjoyed the accompanying wildlife as bees, birds, and butterflies returned to their former haunts. An influx of deer and rabbits that decimated many patio gardens required adaptation to more resistant species.

A group of residents formed the Garden Appreciation Project to post identification labels in the garden and publish guides with the characteristics and maps of locations of the most visible specimens. Eleven species have been described to date, including acacia (4 varieties), camellia (21), cypress (8), leucadendron (9), magnolia (10), and wisteria (6).

Today, Gordon's vision is enthusiastically supported by the residents and enjoyed as a vital asset to the community. Many Manor newcomers say that the gardens were important in their decision to move to the facility.

The Future

Gordon Dill retired in July 2024. BFS Landscape Architects Monterey office has been hired to develop a master plan for the future management of the garden... Whatever they propose and whoever replaces Gordon as Grounds Supervisor, the future evolution of this unique resource must contend with the multiple conflicting challenges of satisfying the residents' expectations for beauty and color year-round while further

reducing water consumption, adapting to a warmer climate, and hardening the site against wildfires.

"Tomorrow to fresh woods and pastures new." — ***Lycidas*** by John Milton (1637)

End Notes and Sources

[1] Where We Come From—Rumsen People & The Land https://slconservancy.org/inspire/native-american-culture/

[2] Bocek, B.R. 1984. "Ethnobotany of Costanoan Indians, California, Based on Collections by John P. Harrington," Economic Botany, 38(2): pgs. 240–255.

[3] ***Diseño del Rancho James Meadows*** is a pen-and-ink and watercolor on tracing paper of the Meadows ranch. From: U.S. District Court. California, Southern District. Land case 159 SD, page 56; land case map A-1178 (Bancroft Library).. "8.". Shows drainage, roads, etc.. Relief shown pictorially. 4362 J35 [https://digicoll.lib.berkeley.edu/record/78532?v=uv#?xywh=-368%2C0%2C2234%2C1157]

[4] James Meadows Tract https://en.wikipedia.org/wiki/James_Meadows_Tract

[5] We are still here. https://www.rumsenohlone.com/

[6] Monterey County Planning Commission, May 10, 2016, Agenda Item 3. https://www2.co.monterey.ca.us/planning/cca/pc/2010/05-26-10/GPZ090003.pdf

[7] In ***A Tribute to Yesterday: The History of Carmel, Carmel Valley, Big Sur, Point Lobos, Carmelite Monastery, and Los Burros*** (1980) Sharron Lee Hale says, "The old Meadows family home was torn down in 1924 and replaced with a new eight-room stucco house. At that time, it was the property of a Mrs. E. V. Northrup." (formerly Ernestine V. Meadows).

[8] Tim Gregory, The Building Biographer, ***Reginald D Johnson, Architect*** from the Pasadena Heritage Newsletter Fall/Winter 1984 [https://s3-us-west-2.amazonaws.com/primolisting-live/uploadcare/6311126d-ede1-413a-a013-042060fd2274/870SSanRafaelBuildingBio.pdf]

[9] ***Carmel Valley Manor: A History*** (2013) pg. 19.

[10] "Langston Hughes in Carmel," ***Carmel Residents Association News***, March 2021, pg 5. [https://www.carmelresidents.org/assets/docs/VoicePDFs/CRANews2011_03_04.pdf]

[11] ***The Political Plays of Langston Hughes***, Southern Illinois University Press (2000) pg. 58.

[12] Arnold Rampersad, ***The Life of Langston Hughes: Volume I: 1902–1941*** Oxford University Press, pg. 21.

[13] Fiona McCleod (William Sharp), ***Poems and Dramas***, Duffield and Company (1911) pg. 364. [https://dn790005.ca.archive.org/0/items/writingsoffionam07macl/writingsoffionam07macl_bw.pdf]

[14] ***Carmel Valley Manor: A History*** (2013) pg 23.

[15] Virginia W. Stone, "The Master of Hollow Hills," ***Noticias del Puerto de Monterey***, Vol. XXVII, No. 2 (June 1966) pg. 9.

[16] Larry Barretto, "Memories of Hollow Hills Farm," ***Carmel Valley Echoe***s, December 1963.

[17] Ray Lovett, "Iron Fencing with a History," ***Carmel Valley Echoe***s, August 1964.

[18] ***Carmel Valley Manor: A History*** (2013) pg 20.

[19] ***Carmel Valley Manor: A History*** (2013) pg 13.

[20] ***Carmel Valley Manor Newsletter*** Vol. 1 No. 3 (June 1962).

[21] From a letter written to the residents, published as "Sliced Gables Reappraised," in ***Carmel Valley Echoes*** Vol. 2, No. 8 (June 1965).

[22] "Environment for the Elderly," ***Progressive Architecture*** (April 1964) pg. 141. [https://usmodernist.org/PA/PA-1964-04.pdf]

[23] ***Carmel Valley Manor Newsletter*** (July 1963).

[24] "Environment for the Elderly," ***Progressive Architecture*** (April 1964) pg. 138.

[25] ***Carmel Valley Manor: A History*** (2013) pg. 55.

[26] ***Carmel Valley Echoes,*** March 1965, pg. 2.

[27] Paul Butler, "Living in a Garden," Accents (2024)

[28] Gordon Dill, "Below Building 28 planting area" notes (2018)

Opposite: The peak of wisteria bloom at the pavilion entrance. Photo: David A. Laws

Above: A dry stone creek bed. Photo: David A. Laws

Bottom: Bruce Newell's sculptures graze on the slope below the Meeting House. Photo: David A. Laws

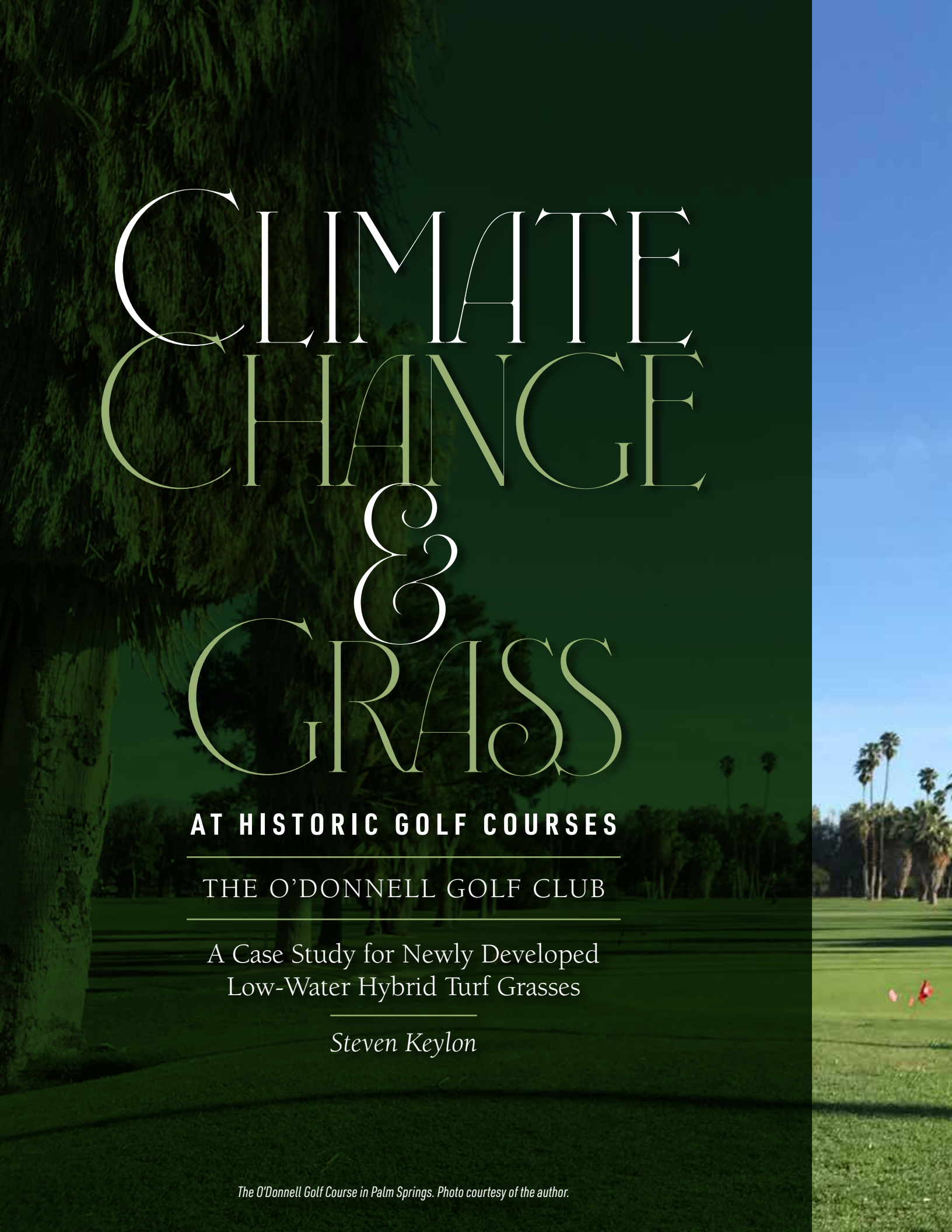
Climate Change & Grass

AT HISTORIC GOLF COURSES

THE O'DONNELL GOLF CLUB

A Case Study for Newly Developed Low-Water Hybrid Turf Grasses

Steven Keylon



The O'Donnell Golf Course in Palm Springs. Photo courtesy of the author.

This 1960s photo of the O'Donnell Golf Club show Tom O'Donnell's 1936 "Golf House," a one-story residence built overlooking his golf course. Note the red and white oleander planted between the Mexican fan palms along the driveway, these were an important landscape feature that have since been lost. The red-tiled roofs of the famed Desert Inn can be seen adjacent to the golf course. Photograph courtesy of The Historical Society of Palm Desert, Desert Beautiful Collection.

BACKGROUND

As climate change persists as a pressing global crisis, its impacts extend to historic designed landscapes. Threats like invasive species and diseases loom large, making the stewardship of these historic landscapes more critical than ever. In California, with water scarcity becoming an increasingly urgent concern, the caretakers of historic landscapes must adapt their operational practices to ensure long-term sustainability. Historic golf courses have long had grass as their primary character-defining feature, which poses concerns for their long-term sustainability. Until now.

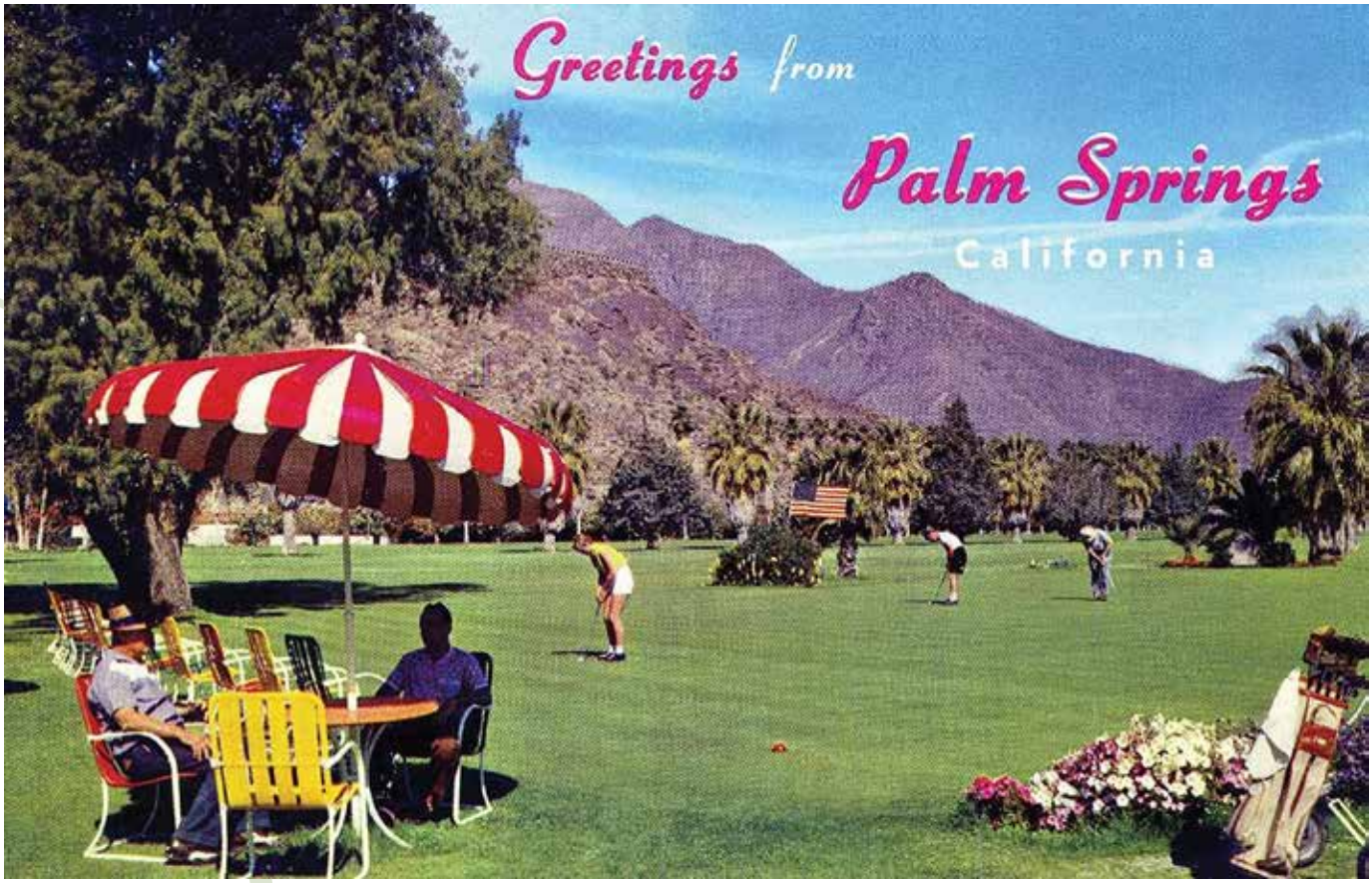
This article focuses on the historic O'Donnell Golf Club (ODGC) in Palm Springs, established in 1927, which has undergone significant changes in its irrigation and grass management systems over the past few years. Lessons can be learned from their experiences, which can hopefully assist not only other historically designed landscapes but also golf courses in general in navigating the challenges of climate change.

HISTORY

Thomas Arthur O'Donnell (1870-1945) was born into humble means in Pennsylvania and arrived in California with limited resources. Through hard work, determination, and serendipity, he became successful, known as one of the "big four" in the California oil industry, along with Edward L. Doheny, Charles A. Canfield, and Max H. Whittier.

Suffering from respiratory ailments, O'Donnell began coming to Palm Springs around 1920, staying at Nellie Coffman's famed Desert Inn. A friendship rooted in mutual trust and respect evolved into a beneficial business partnership. The hotel was opened originally as a facility catering to those with respiratory ailments so they might recuperate in a dry climate. Coffman wanted to expand her hotel into a world-class resort. O'Donnell encouraged her and even helped fund the venture. As part of that arrangement, O'Donnell sought a permanent home in the desert that offered the comforts of "Mother Coffman's" legendary hospitality. In 1925, O'Donnell commissioned the construction of his residence, "Ojo del Desierto," a Mediterranean Revival home designed by William Charles Tanner, directly adjacent to the hotel.

O'Donnell was passionate about golf. Recognizing the absence of a dedicated golf course in the desert, he decided to build his own. In 1926, after completing his house, O'Donnell acquired thirty-three acres of land to the north of the residence. The golf course, initially designed as a private



Above: *Vintage postcard, ca 1955, courtesy Steven Keylon.*

Opposite top: *The long fairways were planted with rows of stately California fan palms and Mexican fan palms, with bushier Arizona cypress planted between. Vintage postcard, ca. 1940, courtesy Steven Keylon.*

Opposite bottom: *Water reduction mandates required the golf club to reduce water significantly in 2022. However, the O'Donnell Golf Club's plan to remove eleven acres of turf would have negatively impacted the historic character of the landscape. Courtesy Koll Farman.*

nine-hole, par-35 layout, opened to his friends and family for the 1926-27 season. O'Donnell invested over $200,000 in landscaping, including Bermuda and rye turf, shrubs, and mature palm trees. O'Donnell later opened the golf course to guests of the Desert Inn and select locals.

In July 1944, O'Donnell, anticipating his declining health, leased the golf course land for ninety-nine years to a group of twenty-five Palm Springs friends and homeowners. In late 1944, O'Donnell met with the mayor and city council of Palm Springs to inquire if they were interested in accepting a gift deed for the golf course. Acceptance required compliance with the existing lease between O'Donnell and the club. In December 1944, the city approved O'Donnell's generous gift. O'Donnell died in February 1945. Despite various attempts to alter or terminate the lease over the years, the lease has remained intact and will expire in 2043.

In 2018, I was commissioned by the ODGC to write a nomination to designate the O'Donnell Golf Course as a Class One Historic Site, which the Palm Springs Preservation Foundation (PSPF) supported. In October 2019, the Palm Springs City Council voted to designate it. PSPF then engaged architect Susan Secoy-Jensen to write the nomination to add the ODGC to the California State Register (and, by extension, the National Register) of Historic Places. That was approved in August 2020.

DILEMMA

In 2021, Governor Newsom proclaimed a drought state of emergency for all counties in California and urged Californians to step up their water conservation efforts while encouraging the State Water Board to prohibit certain wasteful water uses. Anticipating having less water in the future, the management of the ODGC began a program to reduce turf areas on the perimeter of the course and other areas not actively used. That effort reduced turf by about one-and-a-half acres.

Compounding their problem, of the roughly 125 golf courses in the Coachella Valley, the ODGC is the only one that relies strictly on City potable water with no access to a well or reclaimed wastewater. The closest recycled water facility is 2.3 miles away, and even if they were able to access the Desert Water Agency's (DWA) wastewater line, that facility is already at full capacity.[1]

On January 4, 2022, the State Water Board adopted prohibited wasteful water use emergency regulations.[2] In August, Koll Farman, who was then the manager of the

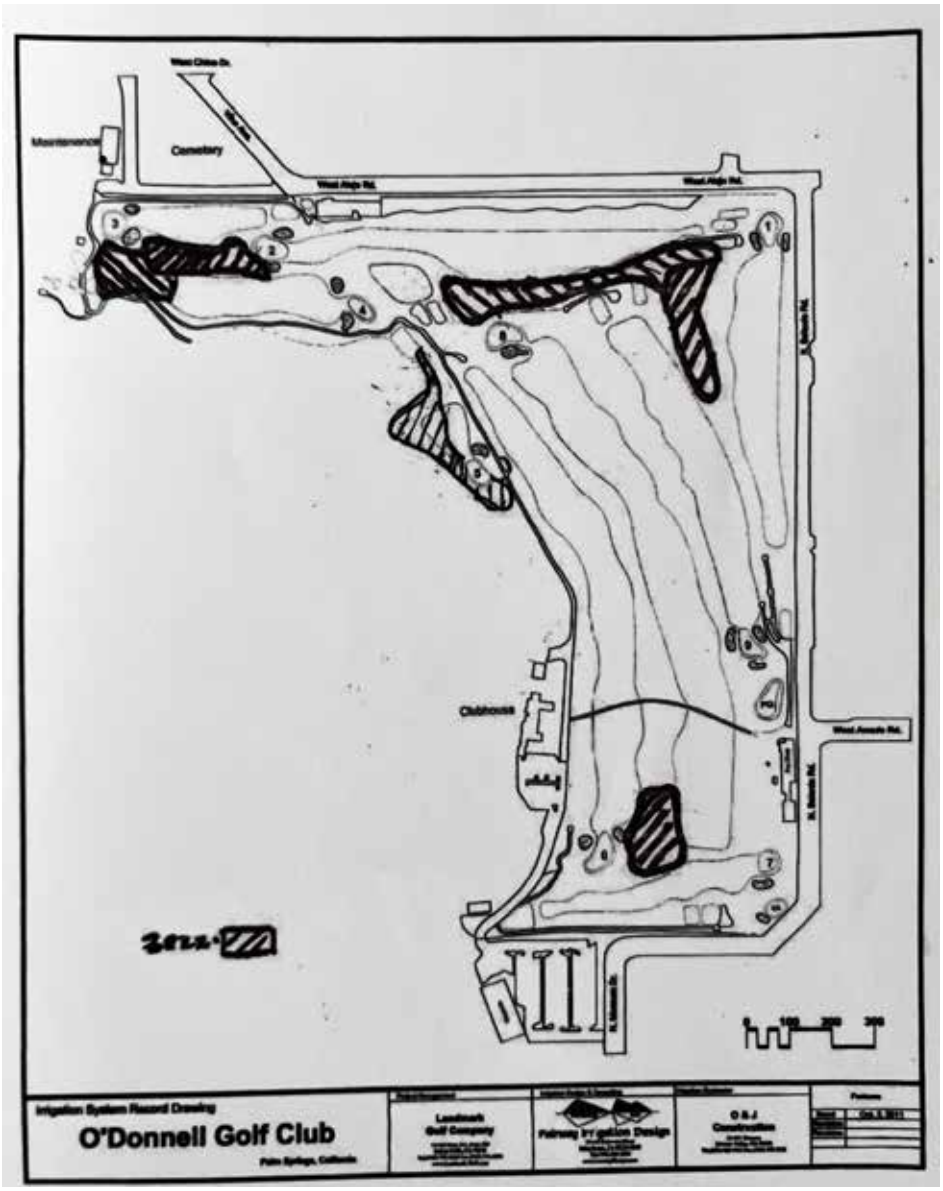
ODGC, received a call from Ashley Metzger, the director of public affairs at DWA. She informed Farman that DWA had implemented a daytime water restriction, which would run through at least January of 2023. There would be a mandate to reduce water use at the club by 30 percent. This restriction would not have allowed the club to overseed the Bermuda grass base with the traditional cool-weather ryegrass, a tradition going back to 1927.

Concerned, Farman explained that having the playing turf green during the winter season was their livelihood. The club would historically overseed the Bermuda base with rye seed the first week in October, which would require heavy watering throughout the daytime hours for five to six weeks. He inquired about alternatives, or if they could be grandfathered in as a Class One Historic Resource. Metzger told Farman to submit a proposal showing how they intended to reduce their turf and water use within ten days.

Farman called on Peter Young, a member of the ODGC board of directors, as well as a member of the club's Greens Committee. Working with other stakeholders at the club, including John Essell, the co-chair of the ODGC Greens Committee, they developed a proposal to reduce around eleven acres of turf in areas not needed for active use. They then intended to apply for grants that would allow them to install decomposed granite and desert plants in these areas, which would reduce their water use by 30 percent.

Around that same time, I was informed of the mandate and the plan to remove eleven acres of turf around the course. As the author of the historic designation, I felt this would have a negative impact on the historic character, as the grass was one of the character-defining features identified, and the areas proposed were not on the perimeter and were much too prominent. I asked them to pause, while we considered alternatives. These included such ideas as not overseeding in some areas, letting the grass go dormant, and getting used to the golden color. I had also read about some new hybrid turf grasses that were much more drought tolerant and hoped that idea could also be explored.

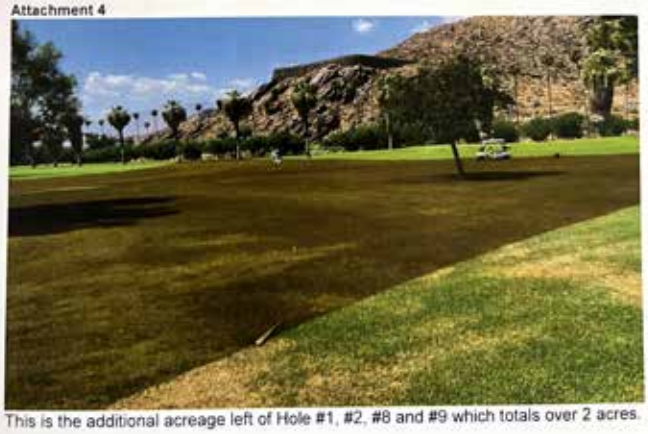
Ultimately, the club was granted a waiver to overseed based on the expectation that changes would be made to reduce water the following season. Shortly thereafter, in January 2023, Farman and Essell attended the Coachella Valley Water Summit and met Dr. Jim Baird, the head of UC Riverside's Turfgrass Research & Extension program. They explained the club's dilemma, and Baird was intrigued and thought it would make a good test site.[3]



Attachment 3

Hole # 2 shown here (2 photos) .... irrigation has been shut off along the entire left side of the fairway. Illustrated in brown to show the significant area equaling 2 acres.

Attachment 4



This is the additional acreage left of Hole #1, #2, #8 and #9 which totals over 2 acres.

The next area of significant savings is in the Northwest corner of O'Donnell GC. This area is just over 1 acre. Water has currently been shut off between hole #3 and #4.

Attachment 8

Hole #3 looking up to #4 tee box. All brown area represented here will be prepped for removal. Irrigation has been shut off.

This page: *Images and text from a proposal developed by O'Donnell Golf Club manager Koll Farman and the club's Greens Committee, showing large areas where turf would be removed and replaced with eleven acres of decomposed granite and desert planting. Courtesy Koll Farman.*

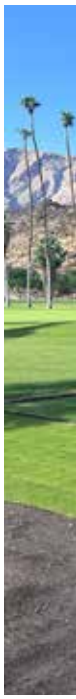
Opposite: *This photo shows a section of Mini-Verde drought-tolerant hybrid Bermuda. The darker strip around the perimeter is also the same grass but will be kept higher. The surround's purpose is to keep the common Bermuda, which is very aggressive and difficult to control, from invading the finished Mini-Verde green surface. Photo from August 2024, courtesy Steven Keylon.*

For two decades, Dr. Baird and his team have conducted innovative research that has enabled California's golf community to cut water usage significantly. These newly developed strains were primarily funded by stakeholders from the golf industry, including the Southern California Golf Association, the United States Golf Association, the Professional Golfers' Association, and the Golf Course Superintendents Association of America. Two of their experimental hybrids, known during development as UCR 17-8 (now renamed "Presidio") and UCR TP6-3 ("Coachella"), are drought-resistant Bermudagrass varieties that require, according to *FORE* magazine, 50 percent less water than typical Southern California lawns. They are soft enough for recreational use, visually appealing for consumers, and suitable for tees, fairways, and rough areas. Notably, they are better at maintaining their green color during winter, a crucial feature that eliminates the need for water-intensive overseeding practices—essential for the future of desert golf.[4]

IRRIGATION

Though the golf course had been fitted with a state-of-the-art irrigation system in 2011, it had never been used to its full advantage and wasn't working properly. According to Farman, David Yoshimura, who had designed the irrigation system, was brought back and told the club, "You have the Starship Enterprise of irrigation systems, but you just don't utilize it properly." Designed in collaboration with his father, Yoshimura had set the zones fifteen years before, and no one had ever checked it again. As a result, the course had been overwatered for years. Farman continues, "We have since replaced both irrigation pumps and motors and replaced the computer (brains) of our irrigation pump station to be more efficient in our water usage."[5]

Young explained, "In addition to the replacement of the electronic pump control system for $40K that allows for real-time information of water usage and alerts to any irrigation faults, we also rebuilt our weather station. That investment ensures that accurate ET (evapotranspiration) data is transmitted to the Rain Bird irrigation



Above: *Large sections of turf have been removed in various areas around the club, so that new hybrid turf species might be tested in the various conditions present at the club. Photograph courtesy of the author, August 2024.*

Opposite left: *O'Donnell Golf Club manager Koll Farman points to a new sod farm that ODGC Turf Committee co-chair John Essel created this summer. Here, they can observe the same four grasses that are being tested elsewhere in the shade for how well they do in bright sunshine. When the photo was taken, only two of the four grasses had been planted. These two hybrids are Tahoma and Coachella, the latter of which was developed by Dr. Baird at UC Riverside. Photograph courtesy Steven Keylon.*

Opposite right: *Working with Dr. Jim Baird, the head of UC Riverside's Turfgrass Research & Extension program, the club has been experimenting with several newly developed low-water, drought-tolerant hybrid turfs. August 2024 photograph courtesy Steven Keylon.*

computer to control the irrigation cycles to only what is required. Lastly, the Club invested $30k to convert our chemical sprayer to GPS control to ensure absolute accuracy of where any products are laid down, eliminating waste associate costs."[6]

TURF REPLACEMENT

With the irrigation system working at its peak, Farman and his turf committee met with Dr. Baird and his team, and they mapped out areas for experimentation. According to Farman, "We are working on re-grassing as many areas as possible (mostly Tee boxes) with new hybrid Bermuda grass such as Latitude, Tiff Tuff, Coachella (new grass from Dr. Baird & UC Riverside), Tahoma. All 4 of these grasses use less water and will maintain color in times of dormancy. The greens have been re-grassed with Mini Verde Bermuda grass. We have about nine acres of roughs. We will not overseed the roughs or water during the season except to maintain soil quality. That should allow them to present a golden backdrop to the greens, fairways, and tees."[7]

Farman says there will have to be a resetting of the expectation that the course will always be emerald green. "It's going to have a little yellowish tint to it at certain times of the year, and that's OK. It's a little drier and a little yellow. So trying to educate members and golfers to know that, hey, it doesn't have to be bright green and damp; it can be firm and fast and a little bit more of a yellow tint."[8]

WETTING AGENTS AND COLORANTS

The golf club is also working with Baird and his team by using different wetting agents and pigments. Farman explains, "These are promoted as aids to enhance distribution of water and thereby require less water. That test is ongoing, and water has been reduced manually by 20%. At the end of the test period, each fairway will be evaluated for its physical condition, and that should point us toward which of the eight products and/or combinations are worthy of using routinely. The second project was to test pigment and

coloring agents to keep the hybrid Bermuda grasses green when the grass goes dormant. In this case, the ten greens are not going to be over-seeded, again, for the purpose of saving water. However, a coloring agent of some kind is required if you want the greens to look natural when no rye is present. Of the three tried, two worked well for us. We will continue to apply the Kiwi and Civitas to the fairways and greens moving forward. This potentially will allow us to cut water by around another 15-25%."[9]

CONCLUSION

On June 17, 2023, the ODGC hosted a golf water summit attended by the general manager of the Desert Water Agency, reps from the Coachella Valley Water District, the United States Golf Association, the Southern California Golf Association, and the Golf Course Superintendents Association of America, as well as Dr. Baird and key assistants as speakers. This was to lay out all of the testing ODGC/UCR had and was going to do in pursuit of permanent water reductions. The event was well attended, and the ODGC was congratulated for preemptively taking the steps needed to reduce its water footprint.

The case study of ODGC exemplifies how historic golf courses can adapt to modern environmental challenges through strategic management and collaboration with agronomic experts. By revitalizing its irrigation system and embracing innovative grass management practices, the course not only enhances its ecological footprint but also ensures its historical legacy remains intact. As water scarcity becomes a more pressing issue globally, this case serves as a model for other courses facing similar challenges. It can also set an example for other historic designed landscapes which featured grass as an important character-defining feature.

Endnotes

1 Email to the author from Peter Young, O'Donnell Golf Club Turf Committee. October 1, 2024.

2 State Water Resources Control Board website, accessed September 25, 2024 (https://www.waterboards.ca.gov/conservation/regs/emergency_regulation.html#:~:text=May%2024%2C%202022%3A%20State%20Water,Office%20of%20Administrative%20Law%20process.)

3 Interview with Koll Farman, manager of the O'Donnell Golf Club, August 28, 2024.

4 "Grass by Design: Pure Research Yields New Strains of Drought-Tolerant Grass," Craig Kessler, *Fore: The Magazine of the SCGA*, Winter 2023 (accessed 9/28/2024: (https://www.foremagazine.com/governmental-affairs/grass-by-design-pure-research-yields-new-strains-of-drought-tolerant-grass/)

5 Email to the author from Koll Farman. September 2, 2024

6 Email from Young, September 11, 2024.

7 Ibid.

8 Interview with Farman.

9 Email from Farman.

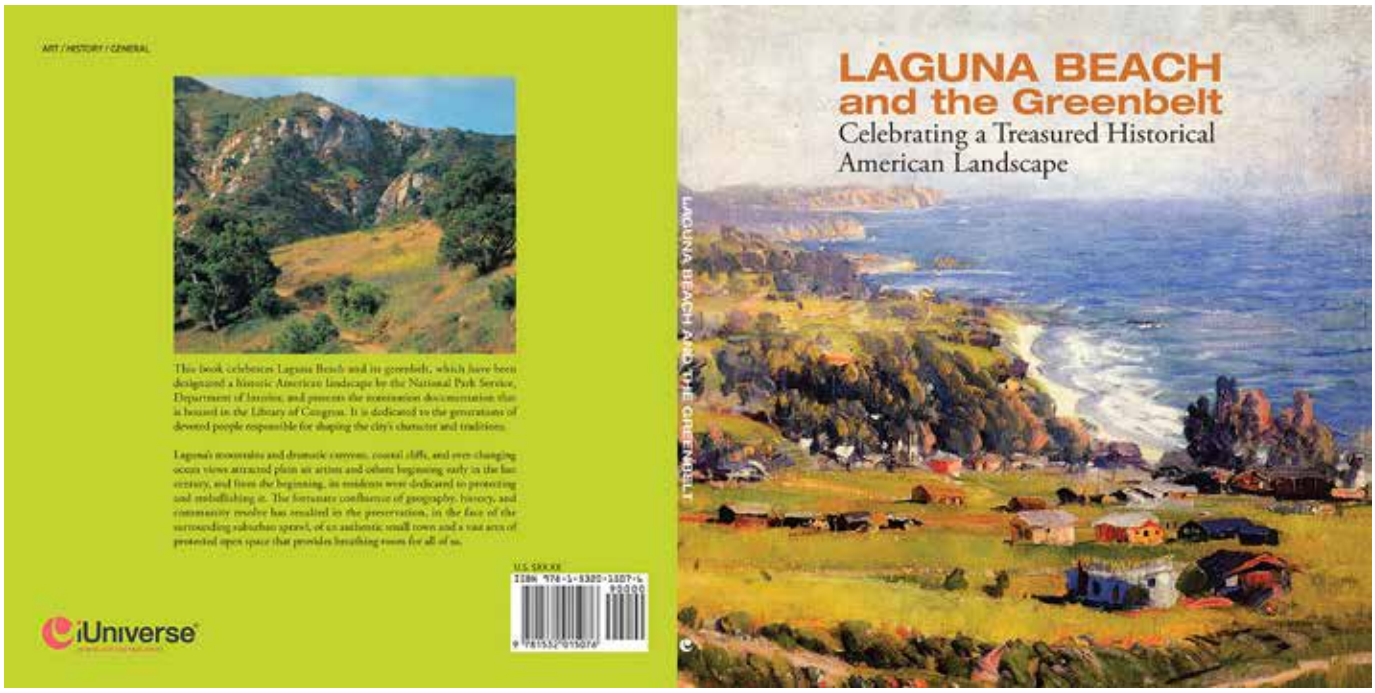
Landscape Inspires Preservation and Creativity

By Ann Christoph, ASLA

CGLHS Annual Conference - Laguna Beach: Art & Activism Preserve a Coastal Landscape.

Friday, October 25 to Sunday, October 27, 2024.

Laguna Beach Landscape and Seascape. Courtesy Tom Lamb



Above: The cover of the book documenting the Historic American Landscape Survey submittal - HALS 123. The front cover painting on the right is "Laguna Coastline" by Laguna Beach artist Joseph Kleitsch (ca. 1926). Artist Douglas McCulloh says of the book: "The Laguna Beach and the Greenbelt - Celebrating a Treasured Historic American Landscape coffee table book is a rarity—a treasure about a treasure. It's also about a fight: ordinary small-town citizens banding together to save an historic American landscape. Laguna Beach and the Greenbelt tells the tale, its marvelous illustrations reveal why the greenbelt is truly a treasure, and its example will inspire citizens everywhere."

Opposite, top: Historic American Landscape Survey area. The Laguna Greenbelt Open Space Preserve and Marine Sanctuary surrounding the city of Laguna Beach. HALS123 - Library of Congress - Project Plan

Opposite, bottom: Laguna Beach Homestead Claims. Thirty-nine homesteads were filed in Laguna Beach. Created by Beryl Wilson Viebeck.

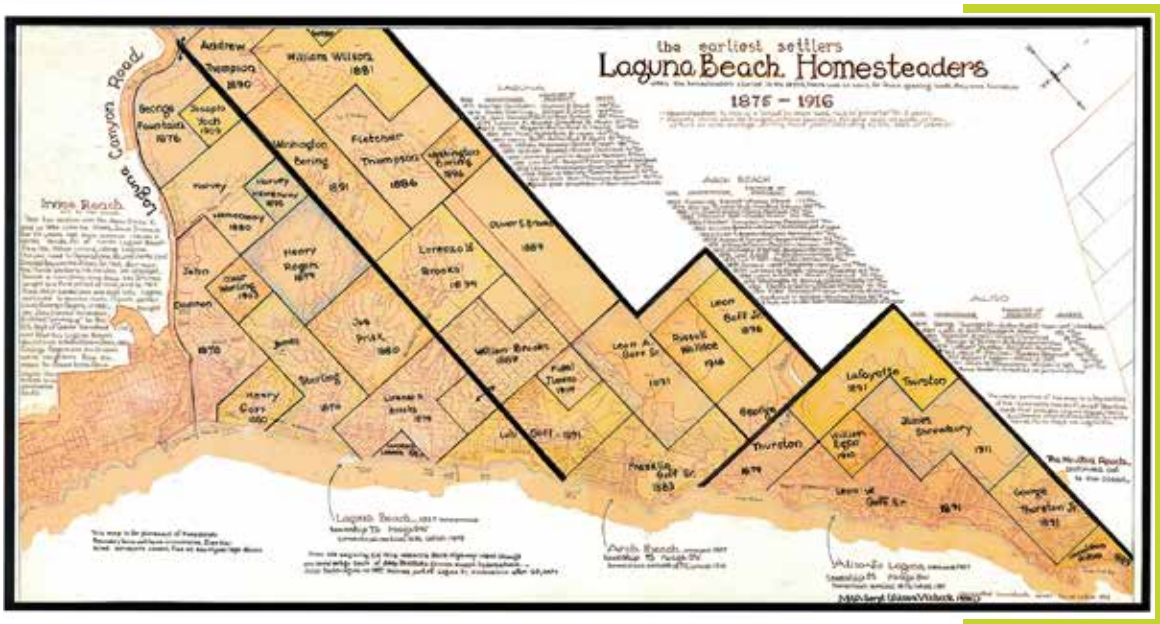
The Historic American Landscape Survey Project for Laguna Beach and the Greenbelt will be featured in the CGLHS conference in Laguna Beach on October 25-27. We will learn about the remarkable individuals who influenced the landscape and gardens of Laguna Beach, including: Frederick M. Lang, a Greenbelt advocate and landscape architect who was featured in the Winter 2013 edition of Eden; and Lucia Fox Edwards, South Pasadena landscape architect who in 1928 designed what is now the memorable and most photographed landscape in Laguna Beach.

We will also visit the home and garden of Hortense Miller, horticulturist, writer, and advocate for climate-appropriate naturalistic gardens. Later in her life she gifted her property to the City of Laguna Beach for public education and enjoyment.

Applying the Historic American Landscape Survey (HALS) program to over 22,000 acres of natural open space surrounding a small city may be unusual, but with Laguna Beach and its Greenbelt, there is a strong relationship between the natural landscape and the cultural history that grew from it. Plein air painters first came to paint this unque landscape an its light in the early 1900s and continue to the present day. the planning traditions have led to the careful building and preservation of this unique community.

The amazing story of the preservation of the Greenbel, its Bluebelt, and the community's village character in the face of fast-moving development pressures may inspire other communities nationwide, as well as local residents, to keep their fragile and beautiful communities protected from decade to decade.

The Historic American Landscape Survey was first introduced to the community in 2009 by American Society of Landscape Architects (ASLA) coordinator Noel Vernon who encour-aged the submittal of documentation of existing parks and gardens, even if they were only in short form. Upon hearing about the HALS program, local landscape architects and other involved citizens were inspired to apply the idea to the entire community and its surrounding open space. This being a larger effort, it took some time to organize its accomplishment. The application was prepared by a volunteer group that first met in March 2015. It included two landscape architects (Bob Borthwick and Ann Christoph, two photographers (Mark Chamberlain and Tom Lamb), a political science professor (Ron Chilcote,editor Barbara Metzger, a local art historian (Eric Jessen), and several writers and researchers including Verna Rollinger. Working in concert with ASLA representative Alison Terry, who coordinated the documentation with the National Park Service, the group submitted the approved package to the Library of Congress in June 2016. From then until February 2017, they worked to produce an illustrated book based on the submitted documentation. The revised and expanded second edition of this book published by Laguna Wilderness Press will be available for pre-purchase at the CGLHS conference.



"This national recognition confirms what we know—our unique town is a treasure," commented Mayor Toni Iseman. "We need to be dedicated to preserve what those before us created. Future generations will thank us for our historic town and the Greenbelt we fought so hard to preserve."

Above: "Laguna Road" by Joseph Kleitsch. This view of the downtown village of Laguna Beach in 1924 with its cottages, eucalyptus and informality is typical of the artist colony prior to construction of Coast Highway (1926). Courtesy City of Laguna Beach.

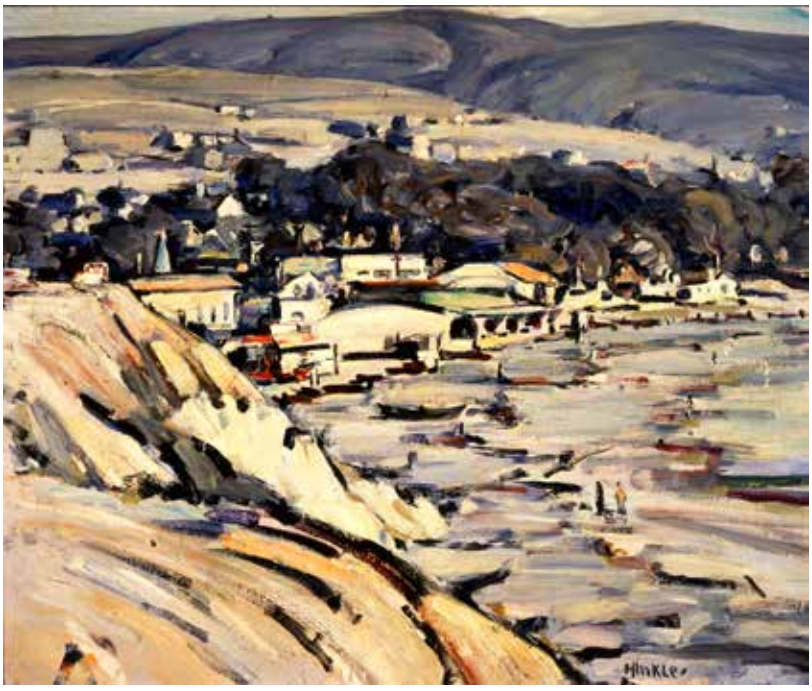
The announcement of the acceptance of the HALS documentation by the National Park Service and the Library of Congress stimulated extensive press coverage and Laguna Beach recognition. The City of Laguna Beach City Council presented a special proclamation to the organizers of Laguna Beach HALS project.

It was judged worthy of recognition as a Historic American Landscape national level recognized project because of the beautiful and dramatic natural landscape setting is intricately related to the community and artistic tradition that grew from it. The geological formations and topography, natural vegetation, and coastal location attracted artists beginning around the turn of the last century. The artistic influence and the landscape's character shaped the town's qualities, the village environment, and the unique community that has descended from it. Laguna's history, including early isolation from other development, its role as an arts colony, and its leadership in environmental preservation all stem from the characteristics and disposition of the landscape itself. The CGLHS presentations elaborate on these complex and remarkable interrelationships.

Building a community in the landscape

The landscape influenced early settlement patterns in Laguna Beach. Because of its mountainous landforms and rocky coastline,

Above: "Laguna Road" by Joseph Kleitsch. This view of the downtown village of Laguna Beach in 1924 with its cottages, eucalyptus and informality is typical of the artist colony prior to construction of Coast Highway (1926). Courtesy City of Laguna Beach.



Right: "Laguna Beach" (1929) by Clarence Hinkle. This early view of Laguna Beach shows the village nestling within its landscape of surrounding hills, ocean, beach and groves of eucalyptus planted by early homesteaders. Courtesy Library of Congress - Collection of Festival of Arts.

Above: 1920s Residence of Malcolm St. Clair, film producer (2016 photo). Architectural design is diverse and whimsical, example with the influence of Malcolm's brother, architect Aubrey St. Clair. Courtesy Tom Lamb.

the Laguna Beach area was isolated—almost like an island—from the flatter agricultural areas of Orange County. Considered by early ranchers to be too difficult to graze or farm, the land was left out of the ranchos that were granted in the 1800s. Thus, as late as 1870, there were nearly 4,200 acres of land between the coast and the rancho grants open for homesteading claims. Thirty-nine homesteads were filed in Laguna Beach, the last one in 1916.

The rectangular north–south outlines of the claims overlying the steep and undulating topography were very influential in determining the layout of the streets and lots, parcel by parcel. The absence of a master plan led to informal street layouts, varying lot sizes and shapes, and architectural solutions unique to each location—the foundation of Laguna's village character.

The landscape, eucalyptus groves, and the art colony

The homesteders planted groves of eucalyptus to establish their claims. This became a distinctive element of the landscape and one that was a favorite subject of the plein air painters, who, beginning around 1900, discovered inspiring views in the mountains, canyons, creeks, coastal cliffs, and ocean waves, as well as the village cottages and the groves of trees. Laguna Beach became known as an art colony, with well-known plein air painters such as Norman St. Clair, Edgar Payne, Anna Hills, William Wendt, Frank Cuprien, and Joane Cromwell exhibiting their paintings near and afar.

The Laguna Beach Art Gallery (now the Laguna Art Museum) was founded in 1918. Art festivals and pageants in the 1920s and 1930s were the predecessors of the city's

annual summer art festivals and Pageant of the Masters.

While the plein air painters helped spread the word about the beauty of Laguna, residents worked to preserve and enhance it from the very beginning. In January 1925, the Woman's Club launched a campaign to make Laguna Beach "the Paradise of the Pacific," distributing 700 trees for planting on Arbor Day.

Village planning

Artists were involved in city planning and beautification. Aesthetics and preservation of the quaint character of the village were a focus of its residents. Even the sewage treatment building, built in 1931, was publicized as being "ATTRACTIVE IN DESIGN." In 1940, the city's first land use plan included restrictions on building size, and its 1959 General Plan called for "keeping residential and commercial development in the central area low."

In 1971, with the threat of high-rise construction along the coast, eighty percent of Laguna voters approved a 36' height limit.

As development pressures intensified, the city worked on other ways to protect its character, including preserving heritage trees and buildings, Design Review (1972), and the Specific Plan to protect the downtown's small scale and the variety of shops and services (1989).

Laguna's landscape, with its historic compact downtown where residents often meet face-to-face, has contributed to a sense of community that is reflected in a long list of homegrown community organizations working on social needs, art and the environment. These are the links between landscape and community that the Historic American Landscapes Survey records and celebrates.

Above: South Laguna neighborhood view (2016). Laguna Beach landscape character with tree planting, begun in the early days of the community, has resulted in major tree canopies sheltering the cottage neighborhoods and providing habitat for owls and hawks. Courtesy Ann Christoph.

Laguna Lumber office, 1919, by architect Jean Egasse (2016 photo). Inspired by early artists who moved Laguna's architecture toward the fanciful and creative, this lumber company headquarters/now restaurant reflects the character of French villages experienced by soldiers returning from WWI. Courtesy Tom Lamb.

Greenbelt preservation

In 1968, the adjacent ranches were still grazing cows, and most of Orange County's development seemed safely far away. But local bookstore owner James Dilley had visited England and was impressed with their greenbelt planning. He realized that if the community didn't preserve open space, Laguna Beach would be enveloped by urbanization. He founded Laguna Greenbelt Inc., and step by step, parcel by parcel, over the next forty years, 22,000 acres were preserved. The beautiful landscape inspired persistence, creativity, and heartfelt dedication. Preservation involved active citizenry, the cooperation of city, county, and state governments, and the dedication of land by adjacent landowners.

Milestones include the Orange County Board of Supervisors' adopting the Laguna Greenbelt in concept and deleting major roads planned through the Greenbelt area from the Master Plan of Arterial Highways; the Laguna Beach City Council's acquiring 520 acres at Sycamore Hills; the state of California's purchasing Crystal Cove State Park; the 1989 Walk in the Canyon by 8,000 to 10,000 people protesting the housing and golf course project proposed for Laguna Canyon; Laguna Beach voters passing a $20 million bond issue to help purchase canyon land with the participation of the state and the county; the $12 million state bond issue for open space purchases; and the gift by the Irvine Company of the last 173 acres of its canyon property. Since 1979, the City has acquired some 3,100 acres of land at a cost of over $35 million.

Conclusion

Laguna Beach and its Greenbelt are loved locally and worldwide. The HALS documentation explains those appreciated attributes and how artists and the community worked over time to adapt creatively and sensitively to this beautiful setting. This has resulted in this unique combination landscape of village, vegetation, and landforms worth protecting now and into the future.

The complete sixty-one-page HALS report can be found here: https://tile.loc.gov/storage-services/master/pnp/habshaer/ca/ca4200/ca4204/data/ca4204data.pdf

Left: Laguna Greenbelt, Lakes in the Laguna Canyon. The Laguna Greenbelt creates unique and natural landscape buffer from the urbanization of its neighboring communities. Courtesy Ron Chilcote

Below: The southerly portion of Laguna Greenbelt, looking west. In the foreground are lands that were originally in Rancho Niguel (dedicated for open space as part of the development approvals for Aliso Viejo at the urging of Lagunans.) Courtesy Tom Lamb.

BOOK LAUNCH

California Eden
A Lovely Launch Party

On June 9th, 2024, CGLHS members, family, and friends gathered in Pasadena to celebrate the launch of our newest publication, entitled ***California Eden: Heritage Landscapes of the Golden State.*** The event took place at the gorgeous La Casita del Arroyo in Arroyo Seco, designed by Myron Hunt in 1933 with more recent landscape architecture by Isabelle C. Greene. At the event, ***California Eden***'s co-editors and contributors, Dr. Christine Edstrom O'Hara and Susan Chamberlin, spoke about the project from its initial concept to the stunning book that it ultimately became. An anthology of articles from important, early issues of our journal ***Eden, California Eden*** features freshly edited articles and beautiful new photography from landscape and garden photographers such as Saxon Holt, Rachel Cobb, and Marion Brenner, along with historic photographs that celebrate our state's unique sense of place.

During their presentation CGLHS co-editors Christy and Susan expressed their appreciation to Paddy Calistro, Scott McAuley, and Terri Accomazzo of Angel City Press at Los Angeles Public Library for their publishing expertise. They were a perfect fit for assisting CGLHS in producing ***California Eden.*** Following the opening presentations, Christy and Susan signed copies of the book to gift to contributors and make available for purchase to attendees.

California Eden: Heritage Landscapes of the Golden State is available to order at the website for Angel City Press, in bookstores, and via other online retailers.

OBITUARY:

Barbara Kamb Marinacci

Ellen Baldecchi

Barbara Kamb Marinacci
September 19, 1933 – July 18, 2024

Former *Eden* editor, Barbara Kamb Marinacci, age 90, of Pacific Palisades, California passed away on Thursday, July 18, 2024.

Born on September 19, 1933, Barbara grew up with her older twin brothers and mother in the San Francisco Bay Area and San Jose, before relocating to Pasadena. After graduating from La Rue School for Girls, she attended Reed College, UC Berkeley, and then the Chouinard Art Institute (later CalArts). It was there that she met Rudy Marinacci.

They soon embarked on a promising new life together in New York, establishing their careers; Barbara's as an editor for Dodd, Mead & Co., and Rudy as an art director for J.C. Penney. Marriage followed, and the birth of their first child, Michael. Eventually returning to Southern California, the family settled in Santa Monica and added two more children to their family, Christopher and Ellen.

Barbara was a published author of six nonfiction books, as well as a coauthor, editor, researcher, and ghostwriter of numerous books on subjects as diverse as 19th century actresses, the poet Walt Whitman, commodity speculation, California Spanish place names (co-written with Rudy), and a pioneering book in dietary therapy. Most notable was her editing of legendary scientist Linus Pauling's book ***In His Own Words,*** detailing more than 60 years of his life and work. Additionally, she was instrumental in the publication of Dr. Pauling's book *No More War!*, and many years later worked with him at the Linus Pauling Institute.

In the mid-1980s, Barbara worked as editor-in-chief for the history book division of Windsor Books in Woodland Hills. Later, post-divorce, Barbara moved to Mar Vista and worked as a consultant to Los Angeles-area nonprofit organizations dealing with mental health, education, and ethnic-minority issues. With her project, the Cosmos Circle, she created an HIV/AIDS psychosocial support group and networking program, despite a climate of fear and stigmatization.

In the early 1990s, Barbara moved to Saratoga to live with and care for her elderly mother atop the vineyards at Mount Eden, her winemaker stepfather's property in the Santa Cruz mountains. Rudy joined her there for several years, along with an array of dogs and cats. They continued their horticultural endeavors together on the rugged land, until such time that they returned to their separate lifestyles.

In 2007, Barbara moved to Pacific Palisades. A lifelong gardener and environmental conservationist, Barbara was active in countless organizations, most recently including TreePeople, the Mountains Restoration Trust, and the Palisades Garden Club. She volunteered throughout Temescal Canyon and Los Leones by planting, restoring, and maintaining native species, as well as participating in local school gardening programs. She could be found at the xeriscape garden across from Palisades High school on Temescal Canyon Road, weekly pulling non-native plants and weeds, keeping the garden well-maintained. Her one-woman quest to eradicate the thorny, invasive yellow star thistle weed that choked areas of Pacific Palisades was a testament to her tenacity and determination. In 2011, Barbara received the coveted Sparkplug Award by the Pacific Palisades Community Council in honor of her tireless contributions to the community.

While attending a Palisades Garden Club meeting in 2009, Barbara met CGLHS members Paula Panich and Kelly Comras, who convinced Barbara to take over the editor's position for ***Eden***. During her tenure as editor, Barbara created an extensive bibliographical finding aid for the past issues of ***Eden***, and established a template for future editions that is still used. With Barbara at the helm, the editorial board experimented with the use of color photography and expanded the use of commissioned and high-quality archival photography. Barbara served as ***Eden*** editor until 2013. (Also see: "25 Years of Eden," by Steven Keylon, present editor of ***Eden***, in the Winter 2021 issue, pages 68-80.)

Barbara lost her battle with cancer at her home with family at her side. She was preceded in death by her ex-husband Rudy (Rudolph) Marinacci, and her brother Dr. Barclay Kamb. She is survived by her brother Dr. Peter Ray; her children, Michael and Christopher Marinacci and Ellen Baldecchi; and her grandson Dante Baldecchi.

In lieu of flowers, contributions to any organization who would honor her remarkable spirit are welcome.

"Do not go gentle into that good night,
Old age should burn and rave at close of day;
Rage, rage against the dying of the light."
(Dylan Thomas)

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CALIFORNIA GARDEN
& LANDSCAPE
HISTORY SOCIETY
P.O. Box 220237, Newhall, CA 91322-0237

Address Correction and Forwarding Requested

Front Cover: Sgt. Chris Boni, crew chief from the California Army National Guard, 1-140th Aviation Battalion (Air Assault) out of Los Alamitos Joint Training Base (JFTB), releases water from over head dousing the Rim fire below near Yosemite National Park. The Rim Fire is now the 14th largest wildfire in California's history. The UH-60 Black Hawk Crews are battling the Rim wildfire in support of Bureau of the U.S. Forest Service and Cal Fire.(U.S. California Air National Guard photo by Master Sgt. Julie Avey/ Released) August 22, 2013. Courtesy Wikimedia Commons.

Back cover: "Laguna Landscape" by Jacobus Baas. This current landscape painting shows the enduring beauty and unique characteristics of the Laguna Coastline. Courtesy Library of Congress - Collection of Festival of Arts