

**W**hile some conservationists dismiss established wildlife areas on golf courses as artificial, over the last decade serious conservationists and ecologists are re-thinking

what pristine wilderness means. Some even are questioning whether any pristine areas still exist at all. It seems that the Earth's every corner has been touched by humans in one way or another.

In the book "Rambunctious Garden," author Emma Marris discusses why wildlife conservation must move away from the concept of pristine wilderness. While many conservationists lament the loss of pristine areas, she and many scientists are optimistic about how the world's natural areas are evolving.

Marris is a reporter for *Nature*, one of the world's most prestigious ecological journals. In 2010, *Nature* was the most cited interdisciplinary scientific journal in the world. A few papers published in *Nature* over the last 140 years include the structure of DNA; the human genome; the existence of neutrons; pulsars; and the ozone hole.

In her book, Marris discourages us from trying to imagine what pristine areas looked like long ago and from striving to replicate those conditions today. Because now, when the human reach seems to extend everywhere, it's unreasonable to think we can recreate the same pristine conditions that existed prior to human discovery.

Ecological systems always are changing. In "Rambunctious Garden," Marris encourages us to embrace the continual ecological changes our landscapes endure rather than work aggressively toward past ideals now unattainable. She also encourages us to allow wildlife and plants to be their "rambunctious" selves, then manage them wisely.

"It can be really exciting and invigorating to give up on pristine wilderness as your goal, because then you can have all sorts of other goals to replace it," Marris explains in a video promoting the book. Those goals may include biodiversity, healthy ecosystems and beauty.

Links land golf courses in the United Kingdom have existed for centuries, yet many people

# Embracing Ecological Changes

BY KARL DANNEBERGER



WHETHER YOU'RE  
TALKING ABOUT A  
DENSE FOREST IN  
BRAZIL OR AN 18-  
HOLE GOLF COURSE  
IN NEW JERSEY,  
ECOLOGICAL  
CHANGE IS INEVITA-  
BLE EVERYWHERE.

believe those courses have never evolved. The fact is, ecological systems everywhere always are changing, including golf courses. Superintendents constantly battle exotic animals (rabbits and Canadian geese, for example) and the intrusion of plant material on native grasses.

So, whether you're talking about a dense forest in Brazil or an 18-hole golf course in New Jersey, ecological change is inevitable everywhere. Suppressing natural changes and converting land to its original state is costly, and in many cases, a losing battle.

In "Rambunctious Garden," Marris observed and interviewed conservationists and ecologists in Yellowstone National Park, Biawieza Primeval Forest, Hawaii and Australia. Based on her observations and interviews, we should not mourn the death of pristine wilderness.

If we look beyond conservation as pristine wilderness and open our eyes to the natural areas around us, new and exciting areas of conservation study will open up.

I found Marris' book to be uplifting and optimistic as she looked at the future of conservation and nature. You will, I believe, be encouraged by the changes in how conservationists are looking at natural wildlife areas. As for how we look at natural wilderness areas, I believe the impact on golf courses will be positive.

"Rambunctious Garden" is definitely worth reading, and it's written in a format that is easily read. If you're unable to read the book, a short video trailer of the book captures the result of Marris' findings and interviews.

The video is available at [www.youtube.com/watch?v=9nwQoxzVKIY](http://www.youtube.com/watch?v=9nwQoxzVKIY).

---

*Karl Danneberger, Ph.D., is Golfdom's science editor and a professor at The Ohio State University. He can be reached at [danneberger.1@osu.edu](mailto:danneberger.1@osu.edu).*