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Nature is the Killer App

Craig Calfee uses sustainable materials to create high performance machines

In bamboo, form and function sprout right from the earth.



"Lighter weight is the Holy Grail of bicycles."



It's high-tech and low-toll when it comes to the environment.



Dreaming up cutting-edge, sustainable design can happen in places far afield, often away from the drafting table. Just ask Craig Calfee the founder of Calfee Design and renowned designer of bicycle frames that have literally accelerated the ride. After making his name with carbon fiber bicycles that helped speed Tour de France winners to victory, Calfee got a notion to build a frame from an altogether different sort of fiber material, namely bamboo. What gave him the idea?

"I was playing with my dog, and she went out and brought a piece of bamboo from behind our shop so I could chase her for the stick. And I'm thinking, the stick's going to break in her mouth, but this piece of bamboo was so strong."

With the natural engineering inherent in bamboo, form and function sprout right from the earth. Calfee explains, "Bamboo is such an incredible material in the way it grows out of the ground in the form of a tube—the exact form you want. And you can take it down a mountain at forty miles an hour."

As he was already mulling ideas to build a novelty bicycle for a trade show, a light bulb immediately went off. The resulting bamboo bike was a hit that powered well beyond the publicity stunt, so much so that Calfee Design put it into production in 2005.

Why are people so taken? "They just look at it and think it's quite beautiful," Calfee said. "But the engineering is actually very, very advanced with the bamboo. Its ability to absorb vibration is second to none."

ature has a great R&D department.

"The technology of a bicycle is incredible," he added. "It has to basically disappear out from under you. So the smoothness and suppleness of the parts and the vibration dampening of the carbon or the bamboo make it just disappear." The joy of the ride doesn't stop there. This innovative ride is high-tech and low-toll when it comes to the environment. "People can feel comfortable with that technology," he added.

The bike was a hit that powered well beyond the publicity stunt.

The bike also affords an exceptionally high degree of customization. For instance, Calfee Design's customers frequently ask for components that are lighter and lighter in weight. "So when you're climbing a mountain, you don't get so fatigued. The lighter weight component is the Holy Grail of bicycles." From that first game of catch, the global potential for these sustainable bikes has grown as heartily as the bamboo that inspired them. Now, Calfee Design is starting to train people to build them in Africa.

"Let's take an idea and push it to the limit," explained Calfee. "Let's see if we can use the idea of bamboo bike to start with economic development in places that need it most. You only live once."





TheLuxuryofLess

The Lincoln MKZ Hybrid proves that green luxury isn't an oxymoron.

The Lincoln MKZ Hybrid is a balance between the old expectations of quality and comfort and the modern desire for less. Its hybrid engine delivers 41 mpg in the city, making it the most fuel efficient luxury sedan in America,* while the driving experience and appointments maintain a very real standard of luxury: heated and cooled front seats, Bridge of Weir™ leather trim, and best in class roominess.** It's resounding proof that embracing the new doesn't have to mean giving up the pleasures you've come to expect.

Enter now for a chance to win a bicycle tour of California, inspired by Calfee Design. Lincoln New Century will award one grand-prize winner and a guest a three-day, two-night trip to Northern California, including a bike tour of California wine country. In addition, the winner will receive one Bamboo Road Complete Bicycle created by Calfee Design. To enter, just visit lincolndeaseries.com. You can also watch our interview with Craig, along with other thought leaders at the intersection of design and technology.



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