Helmets don't have to be standard off-the-rack plastic

By Berne Broudy, Outside

In the 1990s, Dan Coyle started making wooden helmets for himself and his buddies for whitewater kayaking, as well as wooden eyeglass frames and paddles. It was a hobby, a use for Coyle's chainsaw and grinder.

Coyle noticed that, structurally, wood is similar to rigid, closed-cell foam. That means it can, with impact, deform and absorb shock like EPS in a traditional bicycle helmet. In fact, Coyle discovered, almost any wood is capable of absorbing more energy than polycarbonate and the ABS plastics typically used in bike, skate, motorcycle, and ski helmets, while also being more durable.

A wooden shell provides protection over a greater spectrum of impact energies, according to Coyle's tests. Add a cork liner and the comfort level compares to other helmets currently on the market.

Now, Coyle has turned his hobby into a business. Using everything from Doug Fir to black walnut, Coyle custom builds one-of-a-kind sports helmets. The hardwoods and most of the softwoods he uses are salvaged.

And all of the sawdust, chips, and splinter byproducts of his work are returned to the ground to decay and re-enter the natural cycle.

Each finished product is unique.

With business growing, Coyle did his due diligence and tested his wood/cork technology at an accredited impact lab. But because they are custom made, Coyle's helmets are not certifiable.

Helmets start at \$375.

Check out his website.