

Travel Light With Luggage Made From Recycled Plastic Water Bottles

March 5, 2015 Melanie Haiken

A former North Face executive is reducing globe-trotters' carbon footprint while generating green jobs at a former toxic waste site.

When Magi Raible's grandmother came West in 1941 to work at the Mare Island shipyards in Vallejo, California, she couldn't have envisioned that 74 years later her granddaughter would return to the same spot to launch her own company.

Nor could she have imagined that LiteGear would be an environmental success story, the antithesis of the now-shuttered Navy shipyard that left the city north of San Francisco with an environmental disaster that's taken more than 20 years to clean up.



Headquartered in a 7,000-square-foot plantation-style captain's house built in 1882, LiteGear makes ultralight travel bags and suitcases out of recycled plastic water bottles. "We ship entire containers of plastic water bottles to China, but it's time we stopped that," said Raible. "Because if you think about it, it's a natural resource, and we should treat it like one."

Break plastic water bottles down into their essential components, and they're essentially petroleum. Flaked, melted, and extruded into polyester fiber, the bottles yield a yarn that is very light and very strong. "Not one additional drop of petroleum is used to make our products," Raible said.

LiteGear's mission to produce sustainable travel gear grew from Raible's long history in the travel industry. Starting at Berkeley-based North Face in her 20s, Raible rose to be the company's director of product development and product acquisition, where she gained the product design and engineering skills that enabled her to develop LiteGear's state-of-the art recycled fabrics.

"When I got the idea for LiteGear, one of my inspirations was North Face's expedition backpacks, which had to be as light as humanly possible without compromising durability," Raible said.

Working with a textile mill in Taiwan, Raible designed a recycled fabric with the strength-to-weight ratio she needed, adding high-density thermofoam to give structure and strength to the frames. "We need our bags to be light, but it's not going to do you any good if halfway through your trip your bag explodes open."

LiteGear's first products hit shelves in late 2013, with the full line launching in March 2014. The company now offers several sizes of suitcases, backpacks, and totes, along with a large selection of accessories, such as a toiletry kit, a money belt, and a fold-over garment sleeve that made industry

end-of-year "must-have" lists. A recent Kickstarter campaign generated more than \$20,000 toward the development of the Mobile Pro, a "smart bag" designed to meet every possible airline carry-on specification.

For a company barely a year old, growth is coming fast; LiteGear products are in more than 200 retail stores around the country as well as big-box retailers Walmart and Sears and catalog retailer TravelSmith.

"I had my eye on Mare Island from the beginning," said Raible. "There's a movement to bring clean, green jobs to Vallejo, and we wanted to be part of it as we expand."

A third-generation Vallejan, Raible grew up one of five children; her father was a shipfitter who built submarines on the base. After a long absence working first for North Face and then travel gear maker Kiva, Raible is thrilled to be back. "There's an amazingly rich history here, and they're doing a great job of restoring it to what it once was," she said.

Closed in 1996, after 143 years of ship and submarine building, Mare Island was contaminated with PCBs, chromium, lead, and other heavy metals as well as oil dumps and leaking batteries. An original cleanup report details the removal of mercury-contaminated soil, live munitions, and "numerous radioactive luminescent items."

Fast-forward almost 20 years, and it's mostly a different story. In 2012, Mare Island earned a prestigious Secretary of Defense Environmental Award for cleaning up 230 acres of the most contaminated land, restoring it to park and salt marsh wetlands and creating almost nine acres of wetlands.

While there are still shuttered buildings and roped-off parcels, there are also acres of historic brick-fronted warehouses and elegant officers' quarters attracting everyone from graphic design and environmental energy companies to the Mare Island Brewing Company and Blu Homes, maker of environmentally friendly prefab houses.

"It feels like a hub of green activity out here on Mare Island," Raible said. "It's exciting to be part of something that feels like the future."