



MATTER OF TRUST'S CLEAN WAVE PROGRAM SEEKS WASTE ALPACA FLEECE

By Meyla Bianco Johnston
Photos Courtesy Matter of Trust

For more than twenty years, the San Francisco-based nonprofit Matter of Trust has been working on an innovative global waste fiber-recycling project utilizing human hair clippings, waste sheep's wool, fur from pet groomers, feathers, laundry lint and alpaca fiber.

A Bright Idea from a Dark Day

Just like many great ideas, this one was totally unexpected. Hair stylist Phil McCrory from Alabama was watching CNN coverage of the Exxon Valdez oil spill in Alaska while shampooing a greasy head of hair. He saw otters and other sea creatures desperately trying to escape the petroleum coating their fur and feathers.

That's when "there was an 'aha' moment!" Betty Cheng, Matter of Trust Director of Operations, says. McCrory realized that he could be part of the solution to the environmental disaster causing so much suffering.

In North America, there are more than 370,000 hair stylists and more than 200,000 pet groomers, each of which generates a lot of waste fiber that could be

collected to sop up the oil.

Lisa Gautier, Matter of Trust Founder and President, reached out to McCrory in 1999 and they partnered on a program to turn waste into resources that would also aid a clean water project. "This was the birth of the Clean Wave Program," Cheng says.

When an oil spill occurred again in 2007, Gautier and McCrory and their community sprang into action in Matter of Trust's own backyard. The cargo ship *Cosco Busan* accidentally hit the San Francisco Bay Bridge and spilled 58,000 gallons of Bunker C fuel.

Cheng says, "Hundreds of volunteers used hair mats to help soak up bunker fuel on Ocean Beach, and donors signed up from around the world to help the cause."

Later, the Clean Wave Program assisted with the catastrophic BP Deepwater Horizon Gulf Coast Spill. "In 2010, the BP Horizon disaster really skyrocketed the awareness. Because the explosion was in April, it corresponded both with Earth Day and alpaca shearing season, so fleece donors responded in droves," Cheng says.

Donors from every zip code in North America and 30 other countries filled 19 warehouses located from Florida to Texas with discarded hair, fur, fleece and nylon pantyhose used to make booms.

Opposite: Debris is stopped by a waddle before it flows into a storm drain in San Francisco. "This method was used after a truck spilled oil from a container it was hauling in the city," Gautier says. "50% of contaminants come from runoff collecting oil in the streets from all the drippy cars and larger spills. Rain will still wash oil into the sewers which often lead to bays and large bodies of water."

Thousands more volunteers signed up to help the Gulf Coast recover by making booms and hosting "cut-a-thons," "shave-a-thons" and "Boom B Qs."

Making a Boom in More Ways Than One

"Clean Wave has created an ideal method of containing oil," Cheng says, and they make oil-absorbing booms in a specific way.

It took years of trial and error to produce an ideal mat to collect oil. The winning combination was an intertwined mixture of "longer human hair felted into a lacy scrim filled with fleece, fur and shorter hair," Cheng says. "The scrim folds around [the fleece] like a burrito wrap and it is all felted again into a thick, flat mat. Since hair bobs just under the surface while fur and fleece bobs on top of the water, this mixture catches the most pollution."

Mats are used in other applications, too. Cheng says Matter of Trust is "working with cities and partners around the world on pilot studies for storm drain catchment cages, fleet drip pan liners, machinery pads, sump tank booms and more."

Matter of Trust's overall goal for Clean Wave "is to divert fibers from the waste stream, sort them into useful stockpiles, create replicable, sustainable green jobs and manufacture renewable material products that clean our waterways."

The hair mats are also used beyond pollution applications to include agriculture and terraforming. The organization is also mindful of its own carbon footprint, considering how to leverage fibers to be processed by local felters and to benefit oil spills or erosion sites geographically closer to them.

What is the difference between a mat, a boom, a waddle and a sock?

A **mat** is flat and felted, like a doormat. Mats soak up spills like a paper towel.

A **boom** is cylindrical – either a rolled mat tied at the ends with twine or just stuffed like a sausage. Booms are like sandbags, a barrier that also soaks up oil, usually in water.

Waddles are booms used on dry land and are often seen around construction sites and drains.

Socks are small booms that often float in a tank, for example.

Continuing Education

Matter of Trust spends a lot of time on the educational component of their organization so more people can understand the need for waste fiber and donations can do the greatest good where they are most needed.

The Eco-Hub is a huge part of that. Located in the heart of San Francisco, Matter of Trust's industrial model factory hosts field trips and corporate off-sites as well as tourists and local visitors.

Gautier says, "Our model factory concentrates on clean air,

One Person's Trash . . .

While so much of each alpaca's fleece is usable in a wide range of goods, there are still bits that go by the wayside. For garments, some of it is too dirty, some of it too coarse.

Before you throw away any fleece, realize it can do a lot of good for the Earth. That same fleece you won't be using and would have to dispose of anyway can soak up oil from an industrial spill. It can also keep storm drains and waterways clean.

Matter of Trust is asking directly for your help — they need clean, debris-free alpaca fleece you don't want. Alpaca breeders' waste fleece will be used in stockpiles to plan for inevitable, future environmental spills.

Gautier says, "Our hope is to have a donation of waste fleece for a research pilot study with the Air Force for storm drain oil spill catchment using a mixture of dog fur, human hair and waste fleece."

Matter of Trust Needs Fleece That Is:

- Huacaya or Suri
- Debris-free – no clumps of dirt, rocks, leaves or twigs
- Any grade or length
- Packed in cardboard boxes instead of plastic bags

Visit www.matteroftrust.org to:

- Watch videos on how hair and fiber collect oil
- Learn how to make pollution-absorbing mats and booms
- Learn more about the Clean Wave project

Visit matteroftrust.org/projects-hair-mats-oil-spills to donate fleece.

Or email team@matteroftrust.org for further information.



water, energy, ideal materials and ecologizing industry."

"We wanted to show the full circle," Gautier says, "so we have a hair salon that showcases the ideal way to collect hair."

Lisa Pomo, the owner of the salon, has been Gautier's own stylist for many years. "When I opened the hub, I asked if she would like to be here for a very reasonable rent to the charity and she said 'yes.'" Pomo gains clients from Matter of Trust

Above: At the Matter of Trust Eco-Hub, hair mats are felted by volunteers Dmitri (front, blue gloves) and Yorgos (tall, in back) from The Arc San Francisco, a learning and achievement center for adults with developmental disabilities. David Duckworth (with the hat) is their coordinator. The machine, which Gautier describes as "wonderful," was specifically designed for Matter of Trust for felting hair by FeltCrafts in New Mexico. Gautier says it took years of back and forth and research and development to customize it.

Opposite: Lisa Pomo styles hair at Pitch Hair Salon front and center at the Eco-Hub. This allows visitors to see Matter of Trust's ideas being put into action in a real-life situation and serves as a demonstration for visitors who then generate ideas of their own for saving the planet. Pomo is also an avid dog lover, and Betty Cheng and Lisa Gautier are now co-raising a service puppy. "So, the hub is full of staff dogs and an adorable, distracting puppy and of course, that helps us talk about groomers and fur," Gautier says.

tours and her clients love the charity so "everybody wins," Gautier says.

Stylists show how they make sure the hair is debris free. Then they package it in clear containers so customers can see the waste product itself, and "everyone feels empowered by the process," Gautier says.

Matter of Trust has hub partners in Athens, Greece and in New Hampshire. Soon, they plan to partner with organizers in Detroit, Michigan.

"As a nonprofit, Matter of Trust coordinates research projects, pilot studies, donor quantities and end-users and helps to subsidize machines for felting start-ups," Cheng says.

"The ultimate goal, however, is to have this concept move toward a green business model supporting cottage industries working with their local natural fiber suppliers around the world.

"The connections with salons, pet groomers and farmers has led to a much wider discussion about recycling and debris-free collection as well as turning waste into resources. Because China no longer wants US recycling due to the 6 percent contamination issues we have, Matter of Trust's Clean Wave Program has been brought in as an example of



Kingdom in September this year. The event is advertised as the UK's largest event designed to showcase innovations that further the prevention, detection and management of chemical spills on water and on land.

"We are very grateful to the Alpaca Owners Association and Jo Ashley, who helped us in 2010 just as she is helping us now to get a lot of donated fleece to the Gulf Coast. It is thanks to networks like yours that we see so much progress in the ecological movement thinking globally, organizing locally and acting individually!" ●



what can work," Cheng says.

Matter of Trust welcomes everyone who wants to join a powerful collaborative of fiber experts. Cheng says, "This program highlights the benefits of a vibrant textile industry in the US.

"Humanity has a lot of solutions

already in the works when it comes to renewables, green jobs, clean water and more. The key is in how others become aware of it."

In addition to the regular initiatives, Gautier will be a keynote speaker at Spill Response Expo in the United

• Personal interviews Lisa Gautier and Betty Cheng.

• "Clean Wave – Hair, Fur and Fleece Donations – Matter Of Trust." Matter Of Trust. Accessed April 11, 2019. <https://matteroftrust.org/297/clean-wave-program>.

• "Contamination Series Expo." Spill Response Expo. Accessed April 29, 2019. <http://www.spillresponseexpo.com/>.

Pilot Study

Seeking waste
fleece donations
for oil spill
clean up mats



Storm drain lined with felted mat made of recycled hair, fur and fleece clippings

Our charity has a model waste fiber felling factory in San Francisco. Our exhibits showcase needs and challenges of the eco-textile sector. Plus, we highlight the importance of clean air, water, energy, green jobs and more.



If you would like to be a part of this research project, please contact team@matteroftrust.org

Our nonprofit can provide tax deductible receipts for your shipping and fleece donations.

Matter of Trust is an ecological public charity established in 1998.

