



Marine Debris Summit urges prevention strategies

By Tamara Dietrich March 8, 2016

Preventing litter in waterways begins at home. And at school, at houses of worship, at neighborhood cleanups, at workplaces, at public parks.

And it succeeds one cigarette butt, one shotgun wad, one plastic grocery bag, one helium balloon at a time.

That's part of the message at the 2nd Virginia Marine Debris Summit convening this week at the Virginia Institute of Marine Science in Gloucester Point.

"Debris in our waterways is killing birds, turtles, other aquatic life, and it's a difficult problem to deal with," said David K. Paylor, director of the Virginia Department of Environmental Quality and Tuesday's keynote speaker. "We really need to get the public to understand the issue and to participate in the solution."

Summit speakers laid out many of those solutions, all of them geared to convincing people to choose to change their behavior.

Getting hunters and even the military — which is increasingly turning to shotguns as a weapon of choice — to switch to biodegradable shotgun wads could cut the billions of plastic wads that end up in waterways and oceans.

Every year, 10-15 billion plastic shotgun wads are produced, said Kirk Havens, director of the Coastal Watersheds Program at VIMS. A shotgun wad is a small plastic cylinder that holds the pellets.

And, because they're so hard to retrieve once they're fired, Havens said, wads end up blighting the landscape.

"This material just doesn't go away," said Havens. "This ends up in the system — and, unfortunately, the stomachs of foraging ocean birds."

But he and others at VIMS have developed a natural polymer that could reduce the problem, biodegrading safely in aquatic environments rather than breaking down into plastic microbeads that can bind with toxic pollutants and work their way up the food chain.

The cost? Havens said it would only add about a buck to a \$25 box of shotgun shells. He and his team are patenting the concept.

In public parks, visitors could be actively urged not to release helium balloons and sky lanterns, said Irene Frentz, a district resource specialist with Virginia State Parks.

Visitors often give little thought to the environmental havoc balloons and lanterns cause once they come back down, she said.

"I think a lot of people just refuse to ask themselves that question," Frentz said. "And if you don't ask it, then you don't have to answer it. ... If you don't ask it, then you're not guilty."

That could change, she said, through a mix of park restrictions and visitor educational posts on kiosks, trail guides, park websites and other media pointing out that, when balloons land, they can suffocate or entangle wildlife.

And the Virginia Beach-based advocacy group Lynnhaven River NOW has developed programs to engage faith communities and schools in litter-prevention and cleanup efforts.

"It's based on the concept that people really do want to do the right thing," said Karen Forget, the group's executive director.

Last year, she said, 72 schools in the city participated in the group's Pearl Schools Program that teaches teachers various environmental strategies, "giving them the tools they need to be effective."

The Pearl Home Program educates homeowners and others on 45 behaviors they could adopt, including composting, planting native plants, driving less, recycling, using rain barrels and helping with litter cleanups.

"Change really happens just one person at a time," Forget said.

The Pearl Faith Communities Program engages congregations in activities such as planting community vegetable gardens, reducing turf on the church or synagogue or mosque grounds in favor of hardy plants, or building nature-based playgrounds, said Pam Northam of Lynnhaven NOW.

"People of faith have a deep understanding of stewardship," Northam said. "These groups who care about Creation have a long view — they think about future generations."

The Marine Debris Summit continues Wednesday. Participants come from academia, conservation groups, and federal, state and local government agencies.

The first summit was held in 2013 and resulted in the Virginia Marine Debris Reduction Plan, the first such plan on the East Coast.

VIMS is affiliated with the College of William and Mary in Williamsburg.