

Sears' farm project lauded at CRA dinner

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By Craig O'Donnell
codonnell@chespub.com

CHESTERTOWN – Bob Parks summed it up when he urged everyone to “improve our backyards, boatyards and barnyards.” With public wastewater treatment plants upgrading to state-of-the-art nutrient removal, additional help for the river will come from farmers and ordinary residents.

The Chester River Association executive director was speaking to more than five dozen people at the organization's annual meeting last Thursday.

Featured speaker Douglas Gill talked about restoring grasslands at Chino Farms. The 5,630-acre farm, east of Chestertown on the south bank, is Maryland's largest. Forty percent of the farm is wildlife habitat. On the rest crops are grown using precision farming.

But first, outgoing President Ed Nielsen

took care of the annual business. The meeting was CRA's first at Washington College for many years, and Nielsen said his group owes it “a debt of gratitude” for its support.

Baird Tipson, college president, spoke briefly for those who had not been on campus before.

Nielsen noted that Michael Moore steps up from treasurer to president. Moore was unable to attend.

Nielsen said the membership is about 1,300 and revenues are up by 34 percent in the past year. The association's projects include:

- working with Queen Anne's County farmers to get them enrolled in cover crop programs;

- a lawsuit over alleged pollution by Velsicol Chemical Corp. of Worton. Its plant is at the headwaters of Morgan Creek;

- advocating for a recently passed Queen Anne's County ordinance requiring nitrogen-removing septic systems in a new Critical Area construction;

- taking part in Attorney General Doug Gansler's recent river audit day.

Gill, a University of Maryland biology professor, talked about an offer from Dr. Harry Sears about 10 years ago. Sears offered him acreage to “start from scratch with corn and soy fields and recreate a habitat that is extinct in the eastern United States.” This prairie once extended from Cape Cod, across Long Island, through New Jersey and into Delmarva.

Gill said the project on 230 acres, dubbed the Chester River Field Research Center, “has been enormously successful recreating native prairie grassland.

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“We've been teaching that environments are fragile (but) biology is unbelievably resilient. Give it a chance and things will recover.”

On the working part of the farm, there is no tillage, minimal chemical use, and computer-based mapping of crop yield so “they put little dabs of fertilizer where it's needed,” said Gill.

Between fields and grasslands are buffers of different kinds so his students can find out which work best.

In 1999, Gill planted eight grass species. By 2004, there were 261 species, including three listed as extinct. “Where did they come from?” he asked. “The soil was loaded with seeds.” He said the farmers told him, “we call those ‘weeds.’”

Johnson grass, Canada thistle and a few other noxious weeds are eradicated with herbicide as the law requires, but otherwise there is no spraying and no mowing. His fields are burned over in a three-year rotation to keep trees from taking hold and to help keep exotic plants in check.

“Native Americans used fire as a tool, they used it in clever ways,” he said.

One surprise is native species that act invasive, sometimes taking over entire fields, Gill said. Black locust, winged sumac, persimmon, switchgrass, deer-tongue grass, trumpet creeper and big bluestem top the list.

Once grasses are established, wildlife reappears. “The star of the show is a stupid little brown sparrow called the grasshopper sparrow, listed as endangered everywhere, but within one month of planting (grass) I had hundreds of grasshopper sparrows.”

Gill's students trap and band the birds. Sparrows migrate during the winter, but “the return rates are staggering, 60 to 80 percent of the males come back, the baby sparrows are returning at 15 or 20 percent, it's simply unbelievable.” Conventionally, 2 or 3 percent baby-bird return rates are considered good.

For nine years his students have kept records of “the oldest grasshopper sparrows known to ornithology.” With something of a scientific wink, Gill said the banding program and DNA evidence have revealed that about half of the grasshopper sparrow babies don't belong to that year's

“social father.”

Bobwhites and barn owls are among other birds that have taken to the grasslands. “The conclusion is, biology wins,” said Gill.

Parks said he hoped the lesson is “if we give our river a chance it will come back.”

Also, Riverkeeper Tom Leigh summarized the CRA's 2007 water quality report card. The 60-mile-long main river earned a D, while the creeks rated a C.

The volunteer Chester Testers are responsible for a program of water testing along the “300-some miles of freshwater tributaries ... it's not a doom-and-gloom picture, but it's not good.” Leigh noted that the five sub-watersheds each have a different predominant land use.

Kent Island is becoming more and more urban, he said. During the 1990s, while Maryland's population grew 10 percent, impervious surface from roads, parking lots and buildings grew 40 percent. This kind of development poses a threat to the lower Chester.

Agricultural areas face different challenges, some of which can be helped with cover crops, he said. The CRA is already active with outreach to farmers.

The association is pushing to require

nitrogen-removal septic systems in Kent's Critical Area, he said.

Morgan Creek has come in for special attention, since Velsicol and the recently shuttered Chestertown Foods both have wastewater permits to discharge into it, said Leigh.

Also, two of the county's wastewater plants discharge into the creek, he said. The Kennedyville plant has been upgraded to state-of-the-art enhanced nutrient removal technology, and the expanded Worton plant is being upgraded too.

Along the main stem, Chestertown's plant has just activated its state-of-the-art treatment equipment. It discharges into the Chester via Radcliffe Creek.

The Corsica River is the object of a state watershed-improvement effort following problems at the Centreville wastewater treatment plant.

As the evening ended, Tyler Campbell presented the 2008 Riverkeeper Award to the recently deceased Pat Nielsen.

She was a founding member, a board member, and president. Her husband Ed accepted the award to a standing ovation.

The outgoing president was also given a matted photo and gavel.