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DEAN HALL/LAKELAND TIMES

## WHEN THE FUR FLIES

Fur flies as an adolescent American bald eagle uses its sharp beak to tear through the hide of a deer carcass on Sunday, March 5, in Boulder Junction.

*Fish like a* **GIRL**

By Beckie Gaskill
OF THE LAKELAND TIMES

### Pollinator Steward Certification training has begun

A couple of weeks ago, I began the Pollinator Steward Certification training. I was excited to see this opportunity come across my email from the Pollinator Partnership. I think it will help me in the way of outreach, when speaking to others about pollinators and their role in the environment.

The series started out, as one would expect, with an introduction to pollinators. Accord-

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# A look at beavers and climate change: Heroes or Villains?

By Beckie Gaskill
OF THE LAKELAND TIMES

At this year's Wetland Science Conference, Dr. Carol Johnston, professor emeritus at South Dakota University presented her talk called, "Beavers: Heroes or Villains of Climate Change?" She completed her research at Voyageur's National Park at the Canadian border and lives in Minnesota, but was formerly a Wisconsin resident, working in wetland mapping for the Wisconsin Department of Natural Resources (DNR).

Beavers are an important part of the history of the state, with beaver fur for making hats stimulating the French and English to explore Wisconsin to procure those precious beaver pelts. Beavers were almost extirpated from the state by 1830. Beavers have now recovered, Johnston said, and now must be looked at in a new role, that of climate change.

Humans, she said, must find ways to reduce emissions and remove carbon dioxide ($CO_2$) form atmosphere and store it in long-term storage. Engineers are working on ways to do that, but for now humans have to rely on natural methods of storing carbon dioxide in plants and soils. This, Johnston said, is where beavers and wetlands come in.

Beavers build dams that impound water. Animal behavioralists, according to Johnston, have found the sound of running water itself is what prompts beavers to build dams.

Water is important to beavers for several reasons. One of those is that water provides safety. They can avoid their main predators, such as wolves, bear and lynx, by swimming away. Beavers can swim up to 10 km/hr, she said.

Water also provides access to summer food resources such as aquatic vegetation. It also provides access to winter resources such as upland trees and shrubs, the bark and other pieces of which are stored in woody food caches near the entrance of their lodges.

Dam building increases the area of water bodies on the landscape. Open water ponds, Johnston's research showed, covered 2.15% of the landscape for every 100 beaver colonies present.

"But I want you to think outside the box when it comes to beaver dams and their effects," she said. "Some beavers dams flood very flat terrain, which doesn't create a lot of open water, but greatly expands wetland area."

While there are small areas of open water in these flatter terrains, she said, most of the areas are covered with various types of wetlands. She gave the example of a beaver dam in Alberta, Canada. At half-a-mile long, it is the longest known beaver dam. While this dam did cause a small amount of open water, the wetlands is created were much larger. In these wetlands there are vegetation changes compared to before the beaver dam existed.

Beaver impoundments change over time as well. When beavers abandon a dam and it deteriorates, the pond bottom re-vegetates rather quickly, Johnston said, and becomes a wet meadow.

The cumulative effect of beavers is much greater when looking at an entire beaver impoundment of active ponds, drained ponds and flooded wetlands. In the Kabetogama Peninsula, where Johnston did her research in Voyageurs National Park, beaver impoundments, by 1990, had altered 13% of the landscape there,

*See* **Beavers**. . . *page 41*