

# A messenger for protected land and climate change

Leanne Jablonski, Guest Columnist

One hundred years ago, Martha the passenger pigeon died in her habitat at the Cincinnati Zoo. She was the last living member of a species that just 50 years earlier had flourished in much of the United States.

There is a cautionary tale that calls us to act on land conservation and climate change.

In commemoration of Martha's death, Ohio Senators Sherrod Brown and Rob Portman introduced a resolution in September (S. Res. 564) recognizing the importance of our abundant natural heritage, the sustainability of our ecosystems and the conservation of our wildlife.

The Senate is expected to vote on the resolution this month. All Ohioans should support this bipartisan effort.

In part, the resolution reads, "(T)he story of the Passenger Pigeon can serve as a cautionary tale and raise awareness of current issues related to human-caused extinction, explore connections between humans and the natural world, and inspire people to build sustainable relationships with other species...

The passenger pigeon was once so common and so widespread that flocks of pigeons flying overhead could block the sun for hours or even days. No one believed a species they encountered daily in such large numbers could be seriously imperiled, with the result that action to save it came too late.

On a recent visit to the Cincinnati Zoo with students in the University of Dayton's Sustainability, Energy and Environment initiative, I was moved by a close-up encounter with an educator's interactive sharing while holding a live bird of a species closely related to Martha. As our human and avian eyes met, I came away with a strong feeling that we must not repeat the mistakes of the past, that this is our time to protect biodiversity.

Today's challenges are daunting. Climate change is poised to be a major driver of species extinction this century. As it was for the passenger pigeon skeptics, it is difficult for some to believe that humans can affect a system as large as the global climate.

But we are already seeing the impacts of earlier springs on bird populations as their feeding patterns fall out of sync with the emergence of caterpillars. Droughts threaten wetland breeding grounds for a staggering number of species. Mammal species are shifting their ranges northward. Many, many species are struggling to adapt to changes that on an evolutionary scale are shockingly abrupt; not all will successfully adapt.

Land conservation can increase their odds and must be a centerpiece of our response to climate change.

Protected lands already provide habitat for 80 percent of the world's protected species. Land conservation is also a proven strategy for removing carbon pollution — which drives climate change — from the atmosphere. In the U.S., natural lands already capture nearly 15 percent of our carbon dioxide emissions.

Protecting more land will both expand this bank and preserve habitat.

Conversely, when land is converted for development, more carbon is released and increases the heat-trapping blanket effect of the atmosphere, which causes global warming. The land loses its ability to act as a carbon “sponge.”

In addition to protecting against biodiversity loss, well-managed lands also mitigate other impacts of climate change such as water shortages, the spread of disease, and food insecurity, and they make natural resources more resilient to change already underway.

As a scientist, care for the gift of the natural world is close to my heart, and I thank Sens. Brown and Portman for their efforts. As a Catholic Marianist sister, I feel a personal responsibility to protect natural resources for the future and to contribute to long-term, systemic solutions to problems that plague peoples of the world today, particularly the most poor and vulnerable. In a statement to the U.N. Climate Summit just last month, the Vatican called for “an authentic cultural change” in our response to climate change. Recognizing the true value of land would surely be a step in the right direction.

Our Greater Miami Valley is blessed with nationally recognized nature centers, a splendid network of parks and natural areas, bikeways along scenic rivers and land protected in conservation and agricultural easements. Such land conservation is part of our way to achieve reductions in atmospheric carbon and improve biodiversity.

Can we learn from the story of the passenger pigeon?

A century later, I hope we can, lest we allow our inaction to lead us into a future full of loss. Will we be able to look another in the eye, or face ourselves years hence if we fail to act?

*Marianist Sister Leanne Jablonski FMI, Ph.D. is a climate change ecologist, faculty on UD's Sustainability Energy Environment Initiative. She directs the Marianist Environmental Education Center which is restoring 100 acres to native ecosystems. <http://meec.udayton.edu>*