This is the third article in the series Carolyn Krause has created to honor Lee Russell and the memory of her husband Bill. They are truly special Oak Ridgers and have accomplished a great deal of significant impact on the world in which they lived. Yet, the humble nature of Lee is still an example to all. She is one of my favorite people. Enjoy Carolyn's research as she focuses on yet another aspect of the life of Bill and Liane (Lee) Russell.

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As an Oak Ridge couple, Liane and Bill Russell were 20th century, world-class scientists who traveled the world and cared about life on Earth. Just as they focused on visible signs of genetic mutations in newborn mice, they later looked for potential threats to the natural environment they loved.

In their first two decades in Oak Ridge, the Russells and their children had frequently enjoyed hiking and white-water canoeing and rafting in East Tennessee and on vacation trips. Once they took their children on a two-week canoe trip down the Green River in Utah.

"Before the mid-60s we had been sadly negligent of our wonderful Tennessee environment," Lee Russell told Steve Stow in an oral history interview. "We awoke to it because of a river that we had just discovered, the Obed River, which is only about a half hour's drive from Oak Ridge. It turned out to be threatened by a dam about to be built on it by the Tennessee Valley Authority. So, we devoted quite a bit of time to fighting TVA on that issue."

In the summer of 1966, a number of Tennesseans became outraged about a government proposal to build yet another road to fragment the Great Smoky Mountains National Park. People preparing to organize a Save the Obed group joined with those concerned about the Smokies to form Tennessee Citizens for Wilderness Planning. TCWP was incorporated in October 1966 as an organization with a mission to achieve and perpetuate protection of natural lands and waters.

According to Lee's history on the TCWP website, "TCWP's unearthing of pertinent facts, plus application of appropriate political pressures, managed to kill the dam project." As a result, the wild, beautiful gorges of the Obed River system in the Cumberland Mountains were not flooded. And the proposed trans-mountain road through the Smokies was defeated.

"We then worked toward getting some legal protection of the river we saved," Lee said. As a result of their efforts, the Obed was classified in Oct. 12, 1976, as a national wild and scenic river under the National Wild and Scenic Rivers Act.

The act, which President Lyndon B. Johnson signed into law on Oct. 2, 1968, was designed to protect wild and scenic rivers from dams and other developments that would alter the streams' wild or scenic nature. The Obed River is the only river system in Tennessee and one of just three river systems in the Southeast to be designated as a wild and scenic river.

Perhaps the greatest achievement of TCWP began with its success in stopping the Corps of Engineers from impounding the Big South Fork of the Cumberland River, creating what would have been the highest dam east of Mississippi River. In 1974 TCWP won permanent federal protection of the 125,000-acre park, which was designated the Big South Fork National River and Recreation Area.

TCWP helped write legislation and found sponsors for three bills enacted into state law, including the Natural Areas Act of 1971. As a result, Tennessee has more than 100 legislatively designated and registered state natural areas.

Locally, TCWP developed in the Oak Ridge greenbelt areas the 11-mile-long North Ridge Trail, which was designated both a state and national trail. TCWP efforts also gained protected status for the Cedar Barrens and Worthington Cemetery, smaller ecologically significant areas in Oak

Ridge

Lee, who has written TCWP's newsletter for many years, told Steve Stow when being interviewed for an oral history at the Oak Ridge National Laboratory that TCWP had become a highly respected environmental organization in the state. "It is very effective because it relies on good research and background information before getting into issues. It also has influential administrative and political contacts."

Lee was a recipient of the prestigious Marjorie Stoneman Douglas Award from the National Parks and Conservation Association for the total work she had done in conservation. The Russells also were bestowed a Lifetime Environmental Achievement Award from the state of Tennessee.

The Russells traveled extensively outside Tennessee. Lee and Bill's first trip abroad together was in 1955 when they attended the international "Atoms for Peace" conference in Geneva, Switzerland. She was the only woman in the U.S. delegation, and she gave a talk on her discovery in mice that X-rays can damage an embryo when a woman doesn't yet know she's pregnant.

In their travels they gave talks and participated on committees that ended up setting maximum tolerated doses for radiation. "A lot of the maximum tolerated doses that are now in effect were based originally on the work that we contributed on the genetic effects of radiation," Lee said.

"In the '80s and '90s, we got to take some interesting trips like trekking in Nepal and going to Indonesia for snorkeling. We went all the way up and down the coast of South America, from Cape Horn to the Panama Canal. Bill and I had some very wonderful trips."

Bill also found time for hobbies. He was skillful at making wooden pendants from dozens of kinds of wood, Lee said. During the interview with Stow, Lee wore a sumac pendant Bill had made.

"He was also a great photographer," she said. "He used to be very active in the Carbide Camera Club. He exhibited his photos almost every year, mostly black-and-white photos. Filmmaking was one of his very big hobbies."

The Russells were also subjects for Margaret Burke-White, the famous photographer. She came to Oak Ridge to shoot photos of the scientific couple for *Life* magazine.

"She set up a camera in our gamma source room, on the third floor, and photographed us in there many times," Lee said. "But, she also wanted to take photos of us outdoors, so we had to pitch a tent in the greenbelt, up above Delaware Avenue.

"It was supposed to look in the magazine like we were out in the wild somewhere. And, she asked me to jump on a pogo stick for one of the wonderful pictures she took here."

The picture we get of the Russells is that, as parents, scientists, scientific colleagues, and environmentalists, they made the world a better and safer place. And Lee at 90 remains active: her history of ORNL's famous Mouse House has been accepted by a scientific journal and may be made available to the public.

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Thank you Carolyn for yet another excellent *Historically Speaking* series. I am so proud of the collaboration and help! The Russells are examples of the greatness we have in our midst and I am afraid we all too often take them for granted. We should be singing their praises in many ways and showing the world how proud we are of them and their accomplishments.

Maybe, just maybe, the introduction of the Manhattan Project National Historical Park and the

involvement of the National Park Service in our Oak Ridge heritage will help to show us that what we have here is truly unique in all the world. A recent museum workshop reinforced that for me when all the visiting museum directors cited our unique heritage as having great heritage tourism potential.

There are NO OTHER "Bill and Liane Russells" in any other location on the planet! They are ours. The only ones in the world. The work they have done is stellar. The lives they have lived are exciting. Oh how proud we are of them! And Lee, we love you for the graciousness you continue to display as a role model for our younger generations.



One of the pendants that Bill made for Lee that she continues to wear with pride



Lee speaks at a recent celebration held for her at the Obed Wild and Scenic River Visitor Center in Wartburg



David "Ace," Lee and Evelyn Russell at the recent 90th birthday celebration for Lee