Cluff Hopla is surrounded by fleas—thousands of them.

The walls of Hopla's office in Richards Hall are lined with wooden boxes that hold the more than 50,000 flea specimens the OU George Lynn Cross Research Professor Emeritus of Zoology has collected and studied during most of his 50-plus-year career.

An internationally known expert in zoonotic diseases—those transmitted from animals to humans—Hopla, at age 85, still travels the world to participate in medical conferences, sharing his vast and always-expanding body of knowledge. In December, he chaired a session and moderated another at a conference in Bangkok, Thailand, where a decade ago he helped establish a comparative medicine program at one of that country's leading universities.

Robert Taylor

On nearly every day of his long retirement from the classroom, distinguished professor emeritus Cluff Hopla can be found in his cluttered Richards Hall office amid the specimens and papers he has accumulated over his more than 50 years as a scientist.

He also continues his research, mostly in Caddo Canyon, Oklahoma, approximately 60 miles west of Norman, where he has converted a 1930s farmhouse and some acreage into a field laboratory. While the flea is his primary subject these days, Hopla also studies diseases transmitted to mammals by the cliff swallow, a single-brooded bird that migrates to South America each winter and back to North America each spring. In collaboration with scientists from the Centers for Disease Control and Infection in Atlanta, he has isolated a virus transmitted by the cliff swallow that is very similar to the West Nile virus, as well as a handful of others that he is trying to fully identify.

But it was mosquitoes, not fleas, that first grabbed Hopla's attention as a young child in Mapleton, Utah. "I read accounts by Sir Ronald Ross, who researched how malaria is transmitted by insects, and wanted to be like him. I studied bugs and reptiles and made slide smears to see what I could find," he recalls.

Hopla learned how to identify malaria parasites as an undergraduate at Brigham Young University in the late 1930s. His formal education was interrupted by World War II, when he served in the U.S. Navy as officer in charge of a malaria and epidemic disease research unit in New Guinea and the Philippine Islands. "I entered the service as a pharmacist's aide, working on diagnosing malaria parasites in soldiers who had returned from Guadalcanal," he recalls. "There was a young Navy doctor who was diagnosing malaria right and left, and I was asked to come look at his slides. They weren't malaria. The senior medical officer took them to the head of tropical diseases, who confirmed my diagnosis and got me reassigned to work for him."

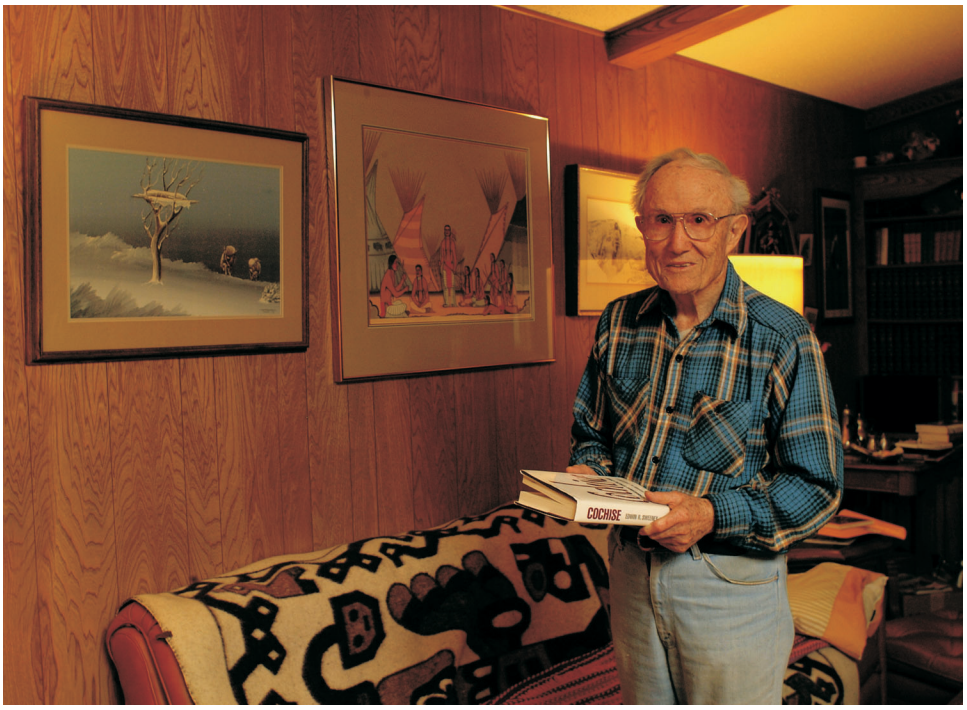
> "There was a young Navy doctor who was diagnosing malaria right and left, and I was asked to come look at his slides. They weren't malaria."

He returned to BYU after the war to study malaria as a graduate student. At about the same time, however, the pesticide DDT—which is toxic to mosquitoes—was discovered and Hopla's mentors told him that, as a result, malaria would be eradicated within 10 years. So he changed his area of specialization to viral diseases and bacteriological diseases transmitted by arthropods (insects, arachnids and crustaceans). "I studied the transmission of tularemia [transmitted by horseflies], which is endemic to Arkansas, which led me to field study in nearby McCurtain County, Oklahoma," he recalls. "That was my introduction to the state of Oklahoma."

With his practical experience and his new specialty, Hopla

admits he could have taught at just about any university in the country. He came to OU in 1951 as assistant professor of zoology and public health because, he says, there was not a lot of information here about arthropod-borne diseases. He stayed because at OU he was able to get the grants he needed to conduct his research. "I had a lot of long talks with Dr. [George Lynn] Cross, who was president of the University and a scientist, who said that if I could get grant funds, I could do whatever research I wanted to do."

Together with the late Howard Larsh, then chairman of the Department of Botany-Microbiology, Hopla obtained grant money to build a zoonoses research laboratory that both could use. "I was never anxious to go elsewhere and start over," he says. "I could do what I wanted to do right here."



Robert Taylor

Second only to his enthusiasm for his scientific acquisitions is OU zoologist Cluff Hopla's love of the Southwestern art he has collected in his Norman home.

Hopla served as chairman of OU's zoology department in the 1960s but returned to full-time teaching and research after being named a George Lynn Cross Research Professor in 1969. As a member of the Animal Resources Study Group of the National Institutes of Health, he led the international community in setting standards for the use and care of laboratory animals.

Since taking emeritus status in 1988, Hopla has continued to research, lecture and write. One of his latest projects is a book on tick-borne zoonoses based on his research in the Caddo Canyon. Looking back, he thinks he may not have written as many scholarly works as perhaps he should have. "I was never in a rush to get things published," he says. "There was always something else to be researched, something else to be added. I've always been more interested in focusing on the question and attempting to get it resolved than I was in writing about it."

His colleagues, however, see Hopla as a role model and an inspiration for both students and faculty. "I can't think of anyone who has taken on so many different assignments and done them as well as Cluff Hopla, who has devoted more than 50 years of his life to making the University of Oklahoma a better institution," says Paul B. Bell Jr., professor of zoology and dean of the College of Arts and Sciences. "He is an outstanding and talented researcher with an international reputation, a gifted teacher who inspires his students and a good University citizen who has provided more than his fair share of service to OU and to the profession."

James N. Thompson Jr., David Ross Boyd Professor and chairman of the Department of Zoology, marvels at Hopla's dedication not only to his research, but also to the department that has been his home for half a century. "Cluff shows no evidence of slowing down. Since retiring, he has sponsored visiting scholars to speak in our departmental seminar series, served as an editor for a professional journal and still regularly attends scientific conferences," he says. "I sometimes think of him as an ambassador for the zoology department."

Doug Gaffin, associate professor of zoology and dean of University College, speaks fondly of Hopla as both a scientist and a human being. "When I came to OU in 1995, I got to know Dr. Hopla as a kind, gentle, unassuming man, an emeritus professor who still arrived to work each day, before anyone else, and slipped a school newspaper into each person's box," Gaffin says. "I suspect that many remain unaware of the source of that daily act of kindness."

In time, Gaffin came to know about Hopla's impact on science as well. "In his heyday, he supervised a thriving, world-class enterprise of post-doctoral and graduate students, many of whom have gone on to become top authorities in the field," he says.

Although Hopla's discoveries have brought him many honors and a considerable measure of fame in the scientific community, it is the purity of the research that drives him. Perhaps OU President Emeritus Paul F. Sharp said it best when he noted during Hopla's 1980 induction into the Oklahoma Hall of Fame: "In an age of science, the scientist becomes a glamorous figure. In this age of the media, there are those who labor outside the spotlight whose work benefits us all, but with little public attention. Such a scientist is Dr. Cluff E. Hopla."

In his ninth decade, Hopla continues to labor outside the spotlight. And, as has been the case since he was a youngster, it is a labor of love.

—DEBRA LEVY MARTINELLI