



In retirement Ralph Venk and Carl Collier practice their professional skills on a specie of patients who roamed the world more than 100 million years ago.

By LINDA COLDWELL  
Photos by Robert Taylor

The pair of dentists work side by side, leaning over their patient with looks of focused concentration. The high-pitched whine of an air-powered drill shrills the air. It might be a scene from any dentist's office in the state, except that this patient is more than 100 million years old.

The skeleton of a *Tenontosaurus*—a plant-eating dinosaur the size of a Brahma bull—is on the lab table encased in a lumpy plaster field jacket. The dentists are using the “air-scribe”—actually more like a tiny jack-hammer—to remove its fossilized bones from the rocky matrix surrounding them. These dino dentists are Ralph Venk and Carl Collier, volunteers in the vertebrate paleontology lab at the University of Oklahoma's Sam Noble Oklahoma Museum of Natural

Ralph Venk, left, and Carl Collier proudly display a sample of their recent dentistry work for the Sam Noble Oklahoma Museum of Natural History. The pair restored this 12-foot mammoth tusk for display in the Discovery Room.

# The Dynamic Dental Duo



Venk and Collier are still using the dentistry tools they were trained with—but these days they use them to carefully remove the rocky matrix that encases these 100-million-year-old dinosaur bones in the museum's vertebrate paleontology laboratory.

History. Venk retired in 1985 from his dental practice in Oklahoma City. A native of Michigan and graduate of the University of Michigan's dental school, he was stationed at Fort Gruber during the war and met his wife, Georgia, at another Oklahoma museum—Tulsa's Philbrook—where the young G.I.s on weekend leave could relax and socialize on Sunday afternoons. After the war the pair were married, and Venk opted to stay in Oklahoma because of good dentist-to-patient ratios and because he had heard of a future dental school to be established at the University of Oklahoma. He later taught operative procedures at the OU School of Dentistry for nearly 10 years.

A decade after his retirement, Venk and his wife moved to Norman and later did a season as members of Leadership Plus, a senior division of the Norman Chamber of Commerce's Leadership Norman program. There they learned about the natural history museum being built on OU's south campus and imme-

diately decided to volunteer at the new facility once it opened.

"It just seemed like a perfect fit for us," Venk says. They were both part of the museum's first class of volunteers in 2000.

Collier, who comes from a long line of Oklahomans on both sides of his family, has a deep love for the state and its history. After graduating from the University of Missouri at Kansas City, Collier returned to Norman where he established his dental practice. He also served as president of the Oklahoma Dental Association.

Collier's enthusiasm for Oklahoma history, plus his hobby as a bone collector (his garage and attic are full of collected skulls) made the new natural history museum an object of special interest to him during its construction in the late 1990s. After retiring in 2002, he and his late wife, Pat, both came on board as docents in the Hall of the People of Oklahoma.

Although Venk and Collier had dozens of mutual friends and acquaintances,

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and in spite of their volunteering at the same museum, they had not met until they both signed on for the first class in fossil preparation in the summer of 2002. On the first evening of training, they were surprised to discover a fellow dentist in the class, and more surprised to find that, by virtue of their dental training, they were already well ahead of some of their classmates in the techniques of fossil prep.

"The work is detailed," explains Collier. "It has to be precise. Turns out a lot of the procedures are the same as those in a dental office. Even a lot of the instruments are donated from the OU dentistry school."

Since meeting in that first class three years ago, Venk and Collier have become fast friends and a regular team in the museum's fossil lab. Together they have cleaned dinosaur skeletons, made casts of bones and even taken a stab at fossil reconstruction—cutting apart casts of a badly distorted *Cotylorhynchus* skull to try to return it to its proper shape for display. One of their largest projects was the restoration of a 12-foot mammoth tusk for display in the museum's Discovery Room.

"We did a root canal on it and some fillings," Venk quips. "Only we used plain plaster instead of silver or gold. We got to use all our dentistry techniques on this one: orthodontics, endodontics and some reconstructive dentistry. It was the biggest tooth I'd ever worked on."

The pair also have assisted on at least

one paleontology dig, a job Venk jokingly claims is “fun for the first two to three hours. After that, it’s pickaxes and shovels and a lot of heavy lifting.”

Though there is plenty of fossil work for this pair of jovial, hard-working volunteers, it is not their only job at the museum. Each also does a weekly Sunday turn as a docent in one of the museum’s permanent galleries—Venk in Ancient Life and Collier in the Hall of the People of Oklahoma. They rarely have missed a shift.

“There is almost always an interesting mix of people on Sunday—people from all over the world,” Collier says. “And the kids that come on Sunday are always really interested. Lots of them have been with school groups and are bringing their parents back.”

In addition to the lab and docent work, Venk also serves as an unofficial photographer for the museum. A talented amateur, Venk has served as president of the Photographic Society of America and the Oklahoma Camera Club. He has taken dozens of photographs of museum exhibits for use by the education and promotions departments and spent a whole season making beautiful photos of the native Oklahoma plants



Not all of the volunteer work Collier and Venk perform for the museum is as delicate as fossil preparation. Here the pair work to level the legs of a protective fiberglass casing they have constructed around the fragile shell of a giant Ice Age turtle.

growing on the museum grounds to be used in a future visual reference of native plants for the museum’s Web site.

The two men have become regular

features in almost every area of the museum, and the museum seems to have become a constant thread winding through each of their lives as well. Both of their wives are also active volunteers. Georgia Venk continues to do weekly shifts in the Hall of Ancient Life. Collier’s first wife, Pat, who volunteered with him in 2002, died later that same year. Carl continued his regular volunteer work, however, and the museum recently has played an important part in a new beginning for him. It was there he met Lenore Pierkarsky, a docent in the Hall of Natural Wonders, and on February 1, 2005, the pair were married.

Ask either Ralph or Carl what keeps them coming back to the museum, and they will give you the same two answers:

“It’s interesting,” Ralph says. “I enjoy meeting great new people.”

“And we’ve done everything,” Carl continues. “It’s always something different.”

Ralph laughs and adds, “And the patients never complain!”



*Linda Coldwell is publications and promotions specialist at the University of Oklahoma’s Sam Noble Oklahoma Museum of Natural History.*



Collier applied his skills in reconstructive dentistry to realign the crushed jaw of a *Cotylorhynchus*, a massive plant-eating reptile common to Oklahoma that pre-dates the dinosaurs. Here Venk and Collier display two casts of the creature’s skull: the original misshapen skull at right and the skull bearing Collier’s reconstructed jaw at left.