After decades of exploring the world’s coral reefs and keeping saltwater aquariums, Bill Johnson learned a new hobby: chip carving. A longtime woodworker, he heard of a woodworking show in Hickory, N.C., near his hometown of Cullowhee. There he attended several demonstrations, including one presented by Leon Harkins of Raleigh, N.C., on the basic techniques of chip carving.

Later, Bill bought a set of chip-carving knives and a book written by Wayne Barton, the country’s preeminent chip carver. With those tools in hand, he began to learn the basics of chip carving. “After my first cut, I was hooked! Chip carving offers everything I love about woodworking: symmetry, precision, unlimited artistic design options, and eye-popping results,” he said. “By altering the size, shape, and orientation of the chips, and the way they relate to other chips, one can produce thousands of interesting patterns and designs.”

Over the next six years, Bill studied everything he could about the art and attended three more of Wayne’s classes, including a seven-day advanced course. “Bill is an excellent carver with an extraordinary ability to meld his vision and artistic skills, the result of which is a path of chip carving he alone has pioneered. His work is unique and truly original,” said Wayne.

As he learned chip carving, Bill had to master the abilities to feel where the tip of the knife is during a cut and to hold the knife blade at the proper angle to remove a chip and form a sharp ridge between it and an adjacent chip. In addition, he said, the preparation for a chip-carving project requires a great deal of patience. “Creating the design … and transferring it to the wood can sometimes be as time consuming as the carving itself.”

Bill had previously taught himself basic woodworking skills, such as crafting simple boxes and picture frames, and eventually learned to make furniture. He developed his chip-carving skills by producing traditional items, such as display plates, wall plaques, cabinetry, furniture, and bookends. Then, a friend and fellow artist, Joe Ruminski, suggested that Bill find a style or an approach all his own to distinguish his work.
“Bill is an excellent carver with an extraordinary ability to meld his vision and artistic skills ... His work is unique and truly original.”

—Wayne Barton
from that of other chip carvers. “I had never considered the concept of a form or style of chip carving. To me, those traditional pieces were the very definition of chip carving itself,” Bill mused.

Responding to the suggestion, Bill challenged himself to create something unique in the world of chip carving while still maintaining the beauty, traditional techniques, and precision of the craft. He found the answer in his other hobbies—scuba diving and saltwater aquariums. He explained, “The singular beauty and tremendous diversity of the undersea world are nothing short of awe-inspiring. Reflecting on that, I suddenly knew that the amazing creatures found in the world’s oceans, especially in and around coral reefs, would become the new ‘canvas’ for my chip carving.”

Bill began experimenting and ultimately taught himself to carve fully in the round. “Chip carving is recognized for symmetry, precise cuts, repetitive patterns, and balance. The shape of a fish or turtle is not generally symmetrical, as they are always in motion, so design decisions must take this into account. When incorporating chip-carved patterns onto the surface of a marine animal, the cuts often go to the very edge of the wood where it is quite thin and difficult to incise without making mistakes. A careful touch is the key in these situations,” he explained. “Another challenge is that most cuts made in chip carving are at least 1/16” deep, but the fins of a fish are much thinner. Patterns designed for these areas require cuts that can be made at a very shallow depth.”

Bill cut the outline of his natural French angelfish on a scroll saw and detailed it by hand using small files and sandpaper. The basswood fish is 8 ¼” by 9” and mounted on a Manzanita burl base.

Noting that body and fin contours also present challenges regarding grain direction, Bill said, “I frequently find myself changing the order or direction of the cuts I make along a row of similar shapes in order to avoid tear-out due to grain changes occurring just under the surface of the wood.”

Another fairly unusual aspect of Bill’s chip carving is that he often paints his sculptures in vibrant colors. “I wanted to represent the shapes and patterns found on some of the more colorful coral reef fish by adding a splash of color.” He accomplished this by airbrushing with acrylic paints. “I have no problems with embellishment!” Bill said with a laugh. “I learned how to use a color wheel and tried various techniques for layering one color over another and blending the edges of a color into another. I like to highlight certain areas with more striking colors without much thought to realism.”

When asked where he plans to go from here and what direction his art might take in the future, Bill smiled and simply replied, “The ocean’s the limit!”


NOTE: Be sure to find Bill’s step-by-step article, “Chip Carving a Reef Fish,” on page 64 of this issue.