ROLLY MUNRO

TOOLMAKER, ARTIST, DESIGNER

Malcolm Zander

Photos courtesy of the artist, unless otherwise noted.

Rolly Munro is a wood artist living in a beachside home in the far north of New Zealand. I first encountered his iconic hollowing tool (the Holy Rolly) in 2003, when I visited him to learn hollow turning. On my first morning there, as I walked toward Rolly's garage workshop from his house, I saw a long continuous ribbon of wet shavings arcing all the way across the wide driveway into a neat pile on the other side. Spectacular. Rolly was at work, and I was instantly hooked.

Toolmaker

Rolly began exploring hollow turning in the early 1980s but found the available gouges and scrapers inadequate because the toolrest did not permit close support for the cutter tip. He ended up using a ½" (13mm) high-speed steel (HSS) circular cutter on a shaft. This was first developed by Teknatool of Auckland, New Zealand, but Rolly added a guard to cover most of the cutter. The great advantage of the guard is that it allows for easier control of the circular cutter and prevents major catches. In the first model, however, the shavings failed to clear the guard assembly. After further experimenting, he developed a new guard with an aperture in it, through which the shavings could escape. This became the basis for the Articulated Hollower MK1, or Holy Rolly, first produced around 2000. That tool later evolved into the Hollower 2.

In use, the Holy Rolly's long foam-covered handle is held horizontally at center height (by the right hand for a right-hander), with the back end tucked firmly between the turner's arm and body. The left hand holds the black knob (which also unlocks the tool shaft, permitting its extension or retraction). The fixed orientation of the knob relative to the cutter plane enables the turner to know the orientation of the cutter, even when it cannot be seen inside a hollow form. The tool is steered with both hands. Lathe speed is quite slow, typically 500 rpm or less, yet the finish is very clean, as the wood is cut rather than scraped.

When dull, the circular cutter can be loosened and rotated to expose fresh sharp cutting edges before it eventually must be sharpened or replaced. The advent of fine-grain carbide cutters increased durability and eased sharpening; the user simply spins the cutter against a diamond hone. Rolly adopted these cutters and also made the tool head symmetrical. Many turners do not have swivel-head lathes and know that hollowing across the lathe bed while leaning

The Holy Rolly Hollower 2

The Holy Rolly introduced a guard that limited depth of cut and provided an aperture for chip ejection.

Tool production

Rolly makes his living primarily as a maker of woodturning tools, which affords him the means to produce world-class sculpture. Above: Wunderkutt 10 hollowers, ready to be shipped out. Below: The Hollower 2 alongside the smaller Wunderkutt 10.

Holy Rolly, a Closer Look

Sidebar photos by Malcolm Zander.

To make his hollowing tool less likely to catch in the wood, Rolly Munro added an adjustable guard, allowing the user to define the depth of cut (*Photos a-c*). A set screw from the underside locks the guard in place.

Two added articulations permit turning around tight corners in a hollow form, if needed (*Photo d*).

a

Guard removed, showing the circular cutter.

b

In Photo b, *the guard is fully closed—no cutting occurs. In* Photo c, *the guard is fully open, with about 1mm of the cutter exposed—an aggressive bite. The user can adjust the depth of cut anywhere between these two extremes.*

c

d

Adjustable articulations allow for comfortable positioning of the cutter head inside a hollow form.

to the left can be very uncomfortable. Rolly's symmetrical tool head allows the turner to run the lathe in reverse and hollow on the right side of the form, which is ergonomically better and makes it easier to see the cutting action. For more, see *Holy Rolly, a Closer Look* sidebar.

Rolly later developed the Wunderkutt 10, a smaller hollower with a ⅜" (10mm) cutter instead of the Hollower 2's ½" cutter. This smaller tool is more versatile and handles hard dry wood better, while the Hollower 2 is very good for rapid hollowing, especially of green wood.

The Munro hollowers are produced by Rolly himself. He builds the shafts and handles in his shop but outsources the cutters, cutter heads, knobs, and handle sleeves, as those parts require specialized processes and equipment. Rolly finishes the raw castings, sharpens HSS cutters (an option to the carbide cutters), and assembles, packs, and ships the tools himself. His exclusive supplier in the U.S. is Packard Woodworks (packardwoodworks.com). Abroad, he sells through MAGMA Fine Woodworking (magma-tools.com), Auprès de mon Arbre (aupresdemonarbre-tournagesurbois.com), and Wood Grain NZ Woodturning (woodgrainnzwoodturning.co.nz). Munro hollowers are used by many turners, both amateur and professional. Fellow Kiwi and wood artist Graeme Priddle comments, "[They are] still the only hollowing tools I use—the Ferrari of the hollow-turning tool world."

Artist

Rolly makes his living primarily as a toolmaker, but ever since his studies at New Zealand's Otago Art School in the 1970s, his first love has always been his artwork. By the 1990s, his sculptures were in numerous prestigious international collections.

Rolly's design inspiration has nearly always been nature. A common element is that of a form opening up, an example of which is *Papatua Form*. Rolly explains, "The idea comes from a variety of forms, like a flower bud, a seed capsule, or a crustacean. The stylized scaled surface near the opening is from crustaceans, in particular the chiton or papatua. The linear elements are meant to visually distort the symmetry while having minimal impact on the actual dimensions. One of my challenges is to take a simple turned form and apply a range of techniques to create a variety of expressions. The design elements celebrate the art forms and cultures of Oceania, a region where I have spent most of my life." ▸

Papatua Form, 2000, Pohutukawa, gold leaf, ebonized black pigments, artist oil, Danish-type oil, 8⅞" (23cm) diameter

Photo: Malcolm Zander

Collection of David and Ruth Waterbury

A master of texture

Rolly's work frequently has a dominant, attention-seeking motif that is supported by a more subtle surface design to enrich, invite, and involve the viewer. For him, texture is often the greatest contributor in creating the feel and character of a work. Rolly employs a great range of textures. He notes, "All surfaces have a texture, whether we notice it or not. We react to surfaces as much as we do to form. Our appreciation is an interaction between our sense of touch and visual perception. What we see as a textural surface, an ant would perceive as rough terrain. In a landscape we see a nearby tree and its textured bark, but when we look away at the distant forest, the texture is made up of whole individual trees."

Rolly continues, "So often we make woodwork and wood art and just simply polish it, which is possibly a reflection of wood's commonly utilitarian/domestic use. Unlike many industrial-age materials, wood is made from the bones of a living entity, often having lived many human generations. It is built of complex cellular structures forming the 'grain,' the thing we polish to see. However, the grain can be revealed and harnessed in a variety of ways, from Ed Moulthrop's massive 'glazed' vessels to Todd Hoyer's weathered and craggy geological forms, Hayley Smith's cool and controlled work, Michael Hosaluk's birch-bark overlays, and more latterly, Pascal Oudet's grit-blasted oak skeletal ware."

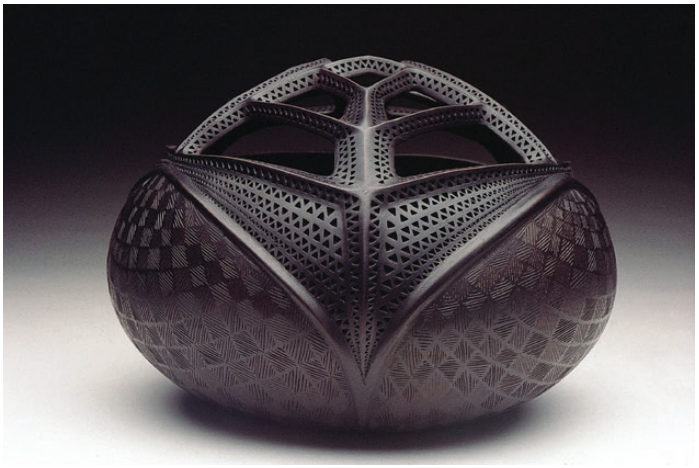
Rolly discovered the art forms of Oceania as an art student in Otago. He was smitten by the Micronesian and Melanesian carvings in the Dunedin city museum. These feelings peaked in his two *Puhapuha* forms, a word that means brimful, or filled to overflowing, in the Māori language. They were inspired by the opening of a *manuka* seed pod (manuka is the Māori name for a tea-tree native to New Zealand).

Both of these sculptures convey an element of architectural form and line, reminiscent of the Eiffel Tower's iron frame. Rolly notes, "I used the black

Puhapuha I, 1999, Pohutukawa, dye, ebonized black pigments, artist oil, Danish-type oil, 8" × 12" (20cm × 30cm)

Photo: John Carlano

Center for Art in Wood Museum Collection



Puhapuha II, 1999, Kauri, ebonized black pigments, artist oil, Danish-type oil, 7" × 10" (18cm × 25cm)

Photo: H. Sameshima

Collection of Fleur Bresler

Photo courtesy of Kenny Muir

Vessel, 2000, Walnut, ebonized black pigments, artist oil, Danish-type oil, 8" (20cm) diameter

Collection of Randy Pi

The use of the quilted texture, first seen in *Puhapuha II*, mirrors the pattern of the farmlands of the Canterbury plains, as seen from above. The blue-gray foothills and even the Rakaia River are evident.

to make a strong division between the upper and lower areas to create the story, while the lower vertical linear texture defines the vessel. In *Puhapuha II*, the lower surface design deliberately 'bends' the form, making it slightly voluptuous, while the upper structure has a mechanical quality."

Puhapuha I was first ebonized, then pigmented using wiping stains and artist oils. The lower section was then carved to reveal the natural red-brown wood beneath the coloration. *Puhapuha II*, made a few months later, is a unique variation. It was first painted black all over, then carved with fine slices through the black paint, so that the kauri wood color beneath was revealed. The wood was buffed to reveal its warmth. The color is far more subtle than that of *Puhapuha I*, appearing almost charcoal in normal light but easily distinguished in sunlight. Because the angle of the slices varies, the bottom section appears as a quilt of black and brown panels, coruscating as one rotates it. A striking effect.

A related work, *Vessel*, inspired by a landscape, stems from Rolly's early times flying over the Canterbury plains, a patchwork quilt of farmland running into the foothills of the Southern Alps—the mountain chain that is the backbone of New Zealand's South Island. Rolly made sketches while looking through the aircraft window, but it was only years later, when he saw Kenny Muir's professional photograph of this landscape, that he decided to make a sculpture reflecting the scene.

The textures in the 2012 *Echinoderm Form* were first used by Rolly in the 1990s and have since been emulated in variations by others. "This is an extension of the *Puhapuha* forms but uses a much more dominant reptilian skin/limpet shell-like texture and has a singularly organic character," he notes.

New and more novel textures are found in Rolly's more recent *Hapuku VII*. Randy Pi, the collector who owns *Hapuku VII*, writes, "The latest Hapuku references cubism and Picasso's Weeping Woman. It is a fish's worst nightmare, with tears, being caught in nets." (The word *Hapuku* refers to a groper fish in the Māori language.) *Hapuku VII* was cut from she oak, with the wood's medullary rays becoming the surface design template. Rolly calls it "an experiment, playing with cool/warm contrast. I wanted the color to be fishy, while allowing the warm medullary ray patterns to clearly link into the grain lines within the lips as well as give the feeling of flow."

One of Rolly's smallest pieces is *Votive*, shown in the 2014 AAW exhibition *Ceremony*. It is an intricate continuation of the shell-form theme, but much smaller, so the very delicate and fine jointing systems were a challenge. *Votive* is made from freshly felled holly and was turned, carved, sandblasted, ▸

Echinoderm Form, 2005-2012, English walnut, ebonized black pigments, artist oil, Danish-type oil, 3" × 6¼" (8cm × 16cm)

Hapuku VII, 2021, She oak, acrylic inks, 5¾" × 5¾" (15cm × 15cm)

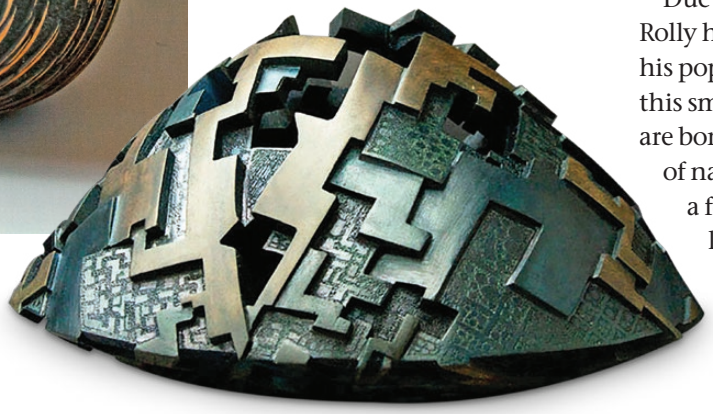
Collection of Randy Pi

Votive, 2014, Holly, artist fixative, 6½" × 2½" × 2" (16cm × 6cm × 5cm)

Photos: Tib Shaw

Stratified Vessel, 2021, She oak, acrylic inks, 2¾" × 5¾" (7cm × 15cm)

Collection of Randy Pi



Andean Relic, 2021, English walnut, acrylic inks, 3¼" × 6¼" (8cm × 16cm)

Collection of Randy Pi

and assembled while still wet, as holly is tricky to dry in thick sections and it discolors if allowed to dry slowly. Rolly chose this wood for its machining characteristics, being of dense, tight grain and a lovely creamy color.

Due to this piece's diminutive size, Rolly hollowed it using a mini version of his popular hollowing tool. He explains this small sculpture: "The minute we are born, we are subjected to the forces of nature, and when we pass, we leave a footprint, for a while at least. The life cycle of a tree: from supple green fresh wood, made into a sculpture resembling bone or shell, and then that too will eventually become dust."

Recent work

She oak is a prized Australian native hardwood with exceptionally wide and dense rays. Rolly has emphasized this feature in his 2021 bowl, *Stratified Vessel*, for which he has excavated the material between the rays and pigmented the trenches left behind to create a geological illusion.

Andean Relic was inspired by the interlocking masonry of Machu Picchu and attempts to evoke a feeling of time and place. It features fine textures and understated colors, so characteristic of Rolly's work.

Metal sculpture

Rolly Munro's metalworking skills go well beyond his toolmaking. He has executed a number of commissions for large-scale metal sculptures, including gates and bridges.

In one commission, Rolly recreated a Haast's Eagle (or *pouakai* in Māori legend). This was the largest eagle that ever existed, though it had a relatively short wingspan 10' (3m) for its weight 33 lb (15kg). It became extinct in New Zealand around 1400. The Haast's Eagle preyed on the giant flightless moa bird, also extinct now. Rolly created his eagle from stainless steel, using a special

Metalworking: bridge ornamentation

Bridge, Hunua, New Zealand

Collaboration—Bridge design: Leigh Munro; Approaches: Rolly Munro

The Haast's Eagle

Construction of Rolly's *Haast's Eagle*, 2016, Stainless steel, 13' (4m) wide.

Photo: Malcolm Zander

Rolly's *Haast's Eagle* captures the full majesty of this extinct giant bird. "Wow, just wow! Flight and power captured, not in solid mass, but in the spaces in between steel."
–Betty Scarpino, wood sculptor

welding technique to secure the form and limit its movement (though there is still significant flex in the wings).

Equipment

Rolly has always been an experimenter and loves playing with techniques and combinations of surfaces, trying to find links to his life experience in them. With *Echinoderm Unraveled*, the Norway maple was rather soft for accepting its very small pierced textures, so Rolly had to develop and add some new techniques to his artistic vocabulary. He notes, "Rotary tools are fast and will allow access to places where hand-powered tools will struggle; however, they create their own footprint. I initially used the NSK Presto extensively but found it has restrictions, as it spins so fast. I felt the charred surface left behind was problematic, so I cut more slowly, using tools that spun at less than 30,000 rpm. I also made small knives, scrapers, files, and tiny sanding pads mounted on shaped bamboo or fiberglass sticks to give me smoother surfaces and cleaner lines."

Rolly continues, "I also discovered the air-powered reciprocating lapping tools, which move back and forth at extremely high speeds. Instead of using the diamond files they are typically equipped with, I created very small ▸

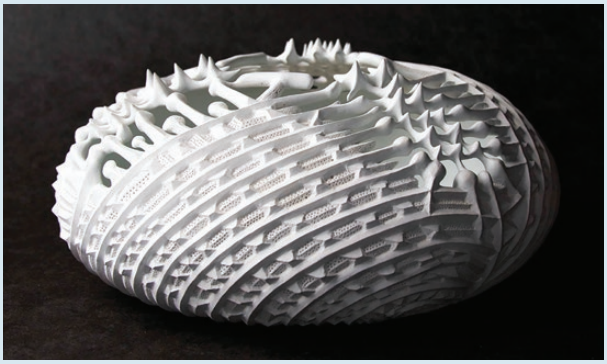
A Long Time Coming—*Echinoderm Unraveled*

In 2014, while demonstrating his Wunderkutt 10 hollowing tool on the Norwegian Woodturning Cruise, Rolly turned and began carving a Norway maple blank, with only a rough germ of an idea. The thorny upper area and the three main divisions were conceived, but Rolly felt he didn't have a concept good enough to carry the main motif. The piece sat on his project bench for years.

Finally, inspiration to break through his mental block came in the form of marine echinoderm forms. (Echinoderms will be familiar to many woodturners as the skeletons of sea urchins, often used in Christmas ornaments.) Rolly notes, "The delicate shells are rich with subtle texture and form. Usually found washed up and sun-bleached within the intertidal zone on our beaches, they are sadly prone to destruction by human feet. The pale colors are ideal for revealing gentle changes in plane and texture. The shell, being the vessel for carrying the inner workings of these creatures, has a linear texture, where I eventually saw a parallel with basketry. Design problem solved."

The piece had evolved over several years, and at one point Rolly thought he had invested a lot of time in a piece of firewood. The vessel in 2019 (*Photo a*) did not look right to him: the central motif was far too dominant, and the prickly designs didn't tie into the bulk of the work. Yet Rolly felt there was something inside worth unearthing. So, in a daring move, he cut away the lip-like borders, integrating and balancing the solid mass with negative space (*Photo b*). The surface lines remained and multiplied, giving the illusion of a weave with long continuous lines circumnavigating the outer form. The wood was variable in color and tone, so it was painted to unify the piece. Rolly air-brushed acrylic inks, shooting at a variety of angles to create subtle changes in the surface tone and hue. The final color is not exactly white but changes gently from a warm cream exterior to a subtle duck-egg blue interior.

Echinoderm Unraveled was completed seven years after its initial conception.



Echinoderm Unraveled, 2021, Norway maple, acrylic inks, 7.5" × 3" (190mm × 80mm), 2021

Collection of Randy Pi

Preliminary stage of Echinoderm Unraveled *in 2019.*

"The more static puncturing of the surface follows the wood's annular rings, creating an understory of texture as well as paying tribute to the material and its story. In almost all my work, whether stained, painted, or heavily textured, I try to retain enough woodiness to keep the viewer in no doubt of its origin." –Rolly Munro

sanding pads from leather and bamboo to fit these tools. I also 'discovered' air-powered engraving tools, again adapted from the metalwork industry. The fine puncturing following the wood grain [as seen on the underside of *Echinoderm Unraveled*] was created with this."

In his work, Rolly uses sandblasting, wire brushes, abrasives, angle grinders, drills, rotary die grinders, reciprocating tools, chisels, and scrapers.

Designer

Most of Rolly's sculptures are deliberately designed. He draws when he is trying to work out a new idea or break down a structural/mechanical problem. A prime example is *Votive*, whose intricate turned-and-carved joints could not have been made without very careful drawings. Sometimes Rolly designs directly onto a roughed-out piece, such as with the two seashore-inspired magnolia wood forms, shown in progress below. The first, *Foam*, has a distinct though delicate wavy grain, which Rolly has exploited to capture the rush and foam of an ocean wave. In the second, *Surf*, he has emphasized another knot and its surrounding grain, with the radiating lines evoking exploding surf droplets.

Rolly explains, "I feel that the elements within wood, such as grain line, intervals, and texture itself often play an important role beyond my abilities to draw. So the idea develops directly as I work with the piece. I like working this way as I feel I'm working *with* the wood, integrating its character into the design and not just treating it as a lifeless lump."

Wood artist Al Stirt has written: "During the course of forty years, I've come to realize that design is my paramount concern. I have found it impossible to separate aesthetics from technique. Without the appropriate techniques, good design is impossible. Without good design, technique lacks meaning." Each of Rolly's sculptures is an illustration of clever, carefully considered design and epitomizes Stirt's statement.

As for techniques, Rolly has a huge repertoire, and if he needs a new one, he invents it. Rolly Munro succeeds because he combines superb design and extraordinary technique. His friend and colleague Graeme Priddle sums it up: "Always impressive, [Rolly] scales designs and crosses media boundaries effortlessly and always captures the essence of an environment in his designs. Incredible attention to detail, not just in what he makes, but also the things he makes it with. He's a great innovator and designer." ■

You can email Rolly at munrotool@gmail.com.

Malcolm Zander is a New Zealand-born wood artist living in Ottawa, Canada. For more, visit his website, malcolmzander.com.

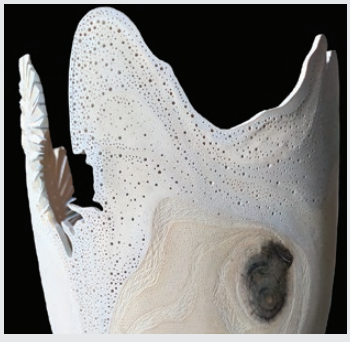
Rolly's air-powered engraver

> **"Rolly Munro is one of the rare artists whose work emanates power, feeling, and energy from a radiant human. He establishes a connection with his work that seems rather magical.**
> **—Betty Scarpino**

Some of Rolly's tools

The air-driven tools 4th and 5th from the left are reciprocating lapping tools, designed for fine smoothing of metal parts. Rolly adapted them for fine sanding, texturing, and fine cutting of wood.

Designing with the grain



Foam and *Surf*, in progress, magnolia, acrylic inks