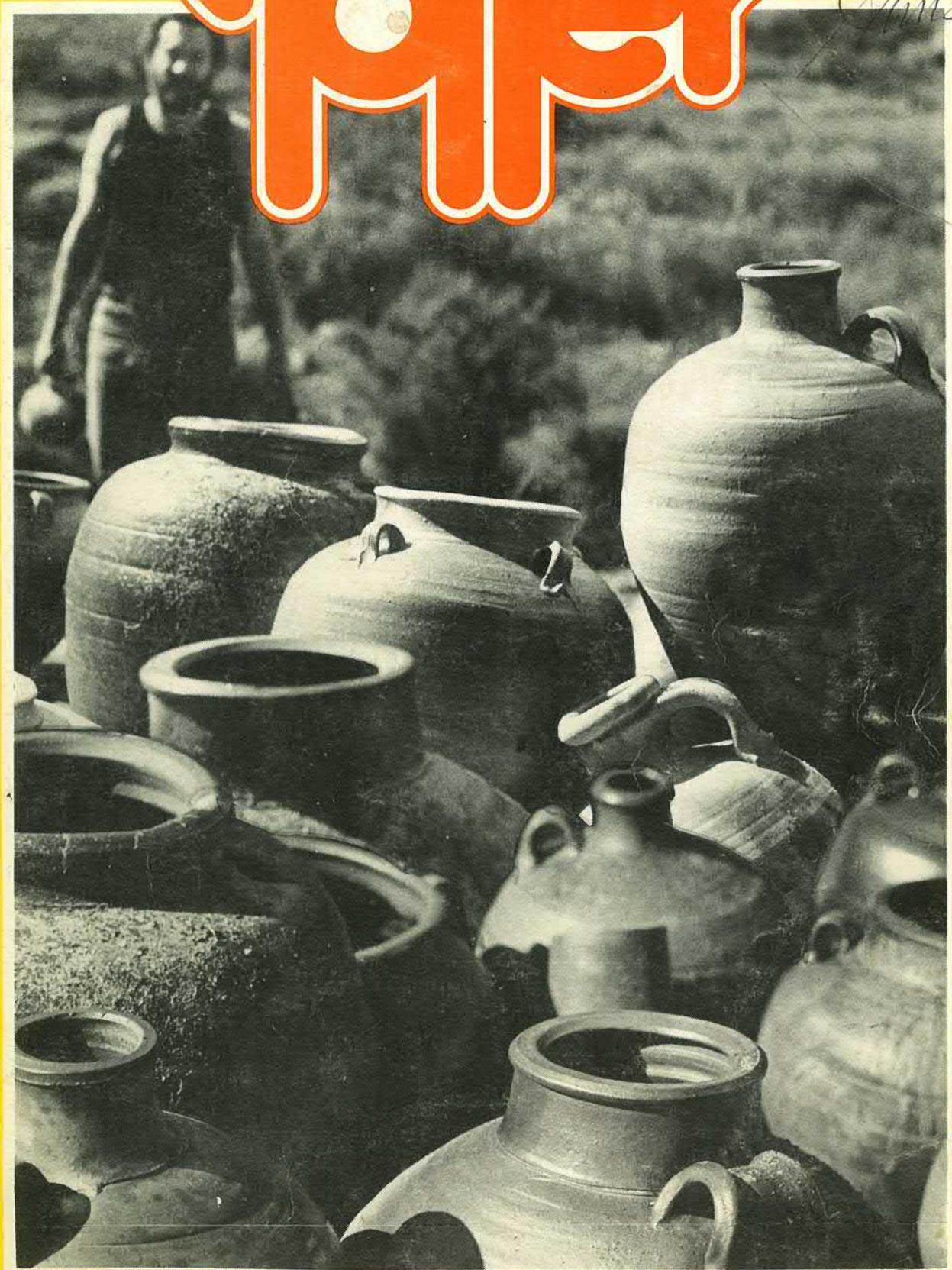


New Zealand Potter
Vol 24/2 SPRING 1982

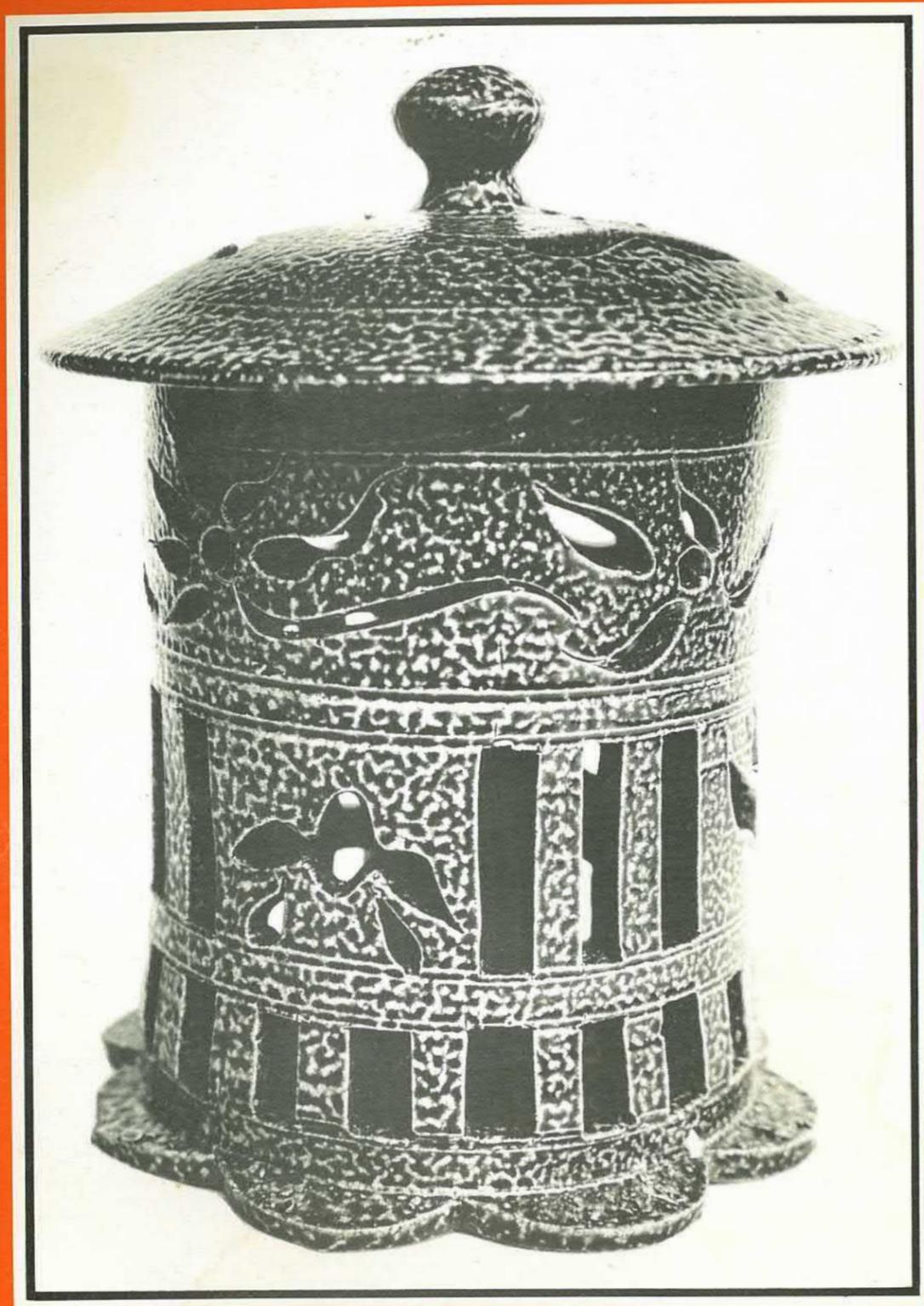
Potter

*Musek
Hanson*



anagama firings

Lantern pot salt glazed by Ann Ambler photographed at NZ Craftworks by Richard Hendry



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Potter

New Zealand Potter
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Cover: pots by Chester Nealie photographed by Steve Rumsey

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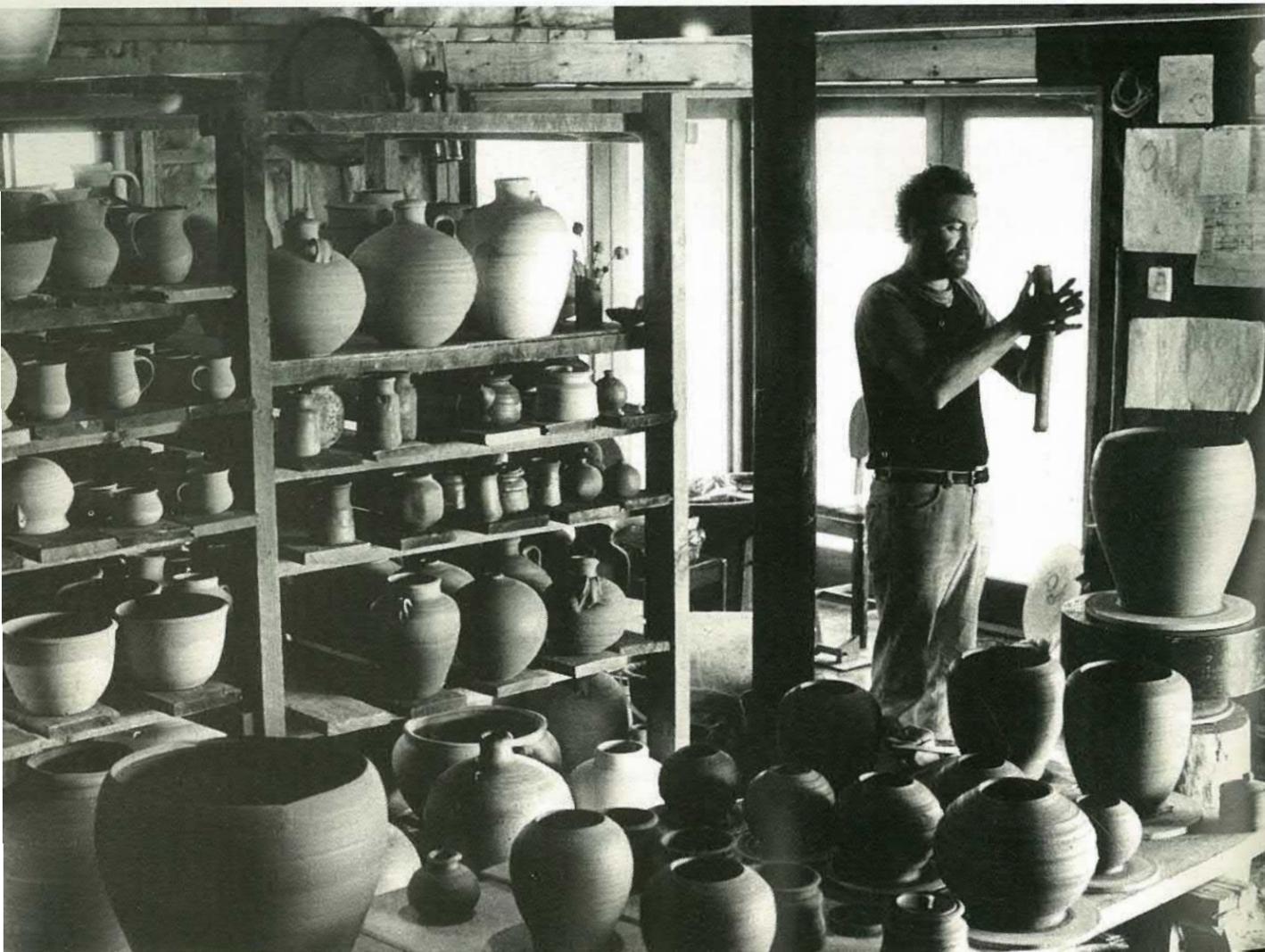
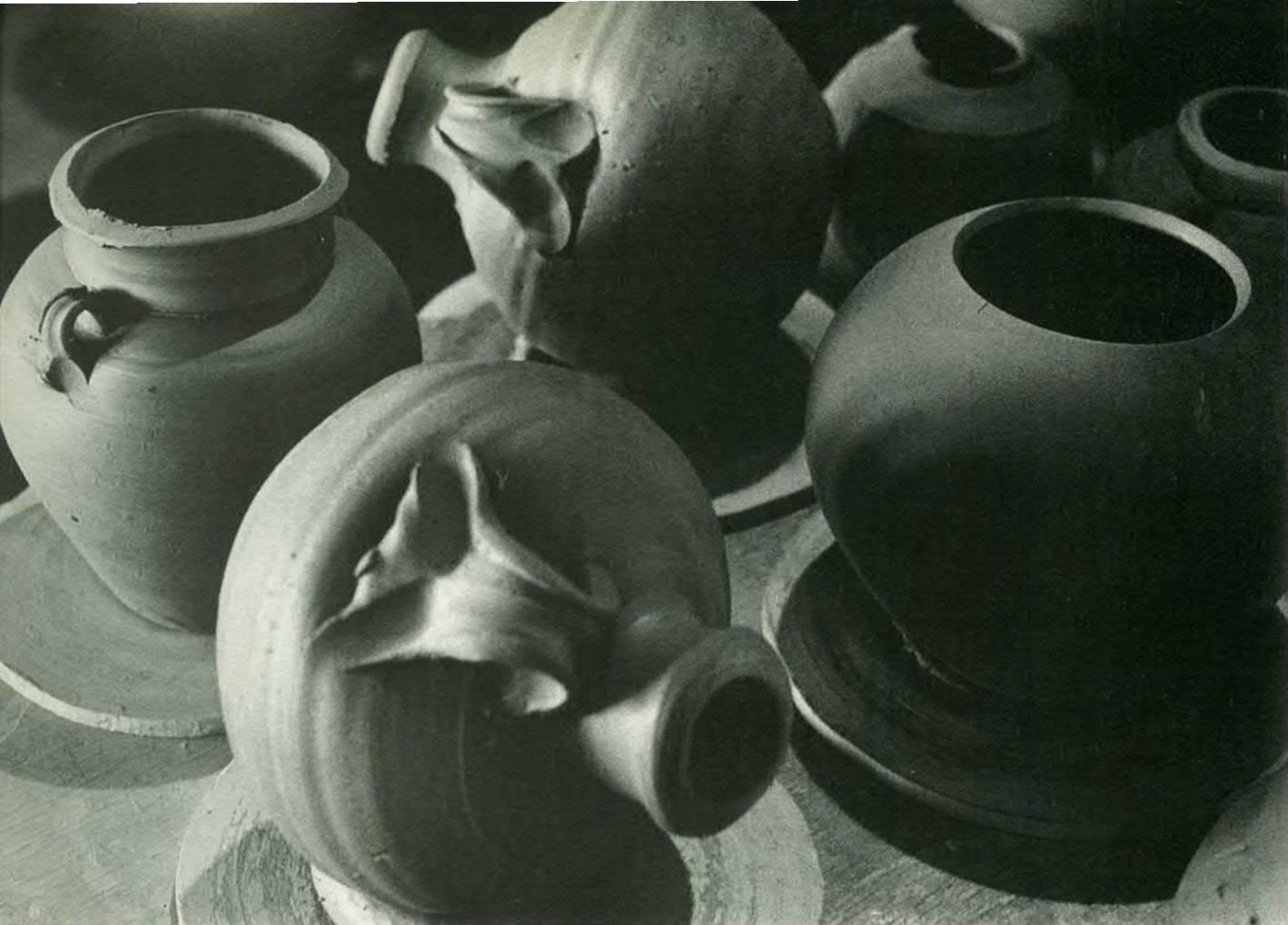
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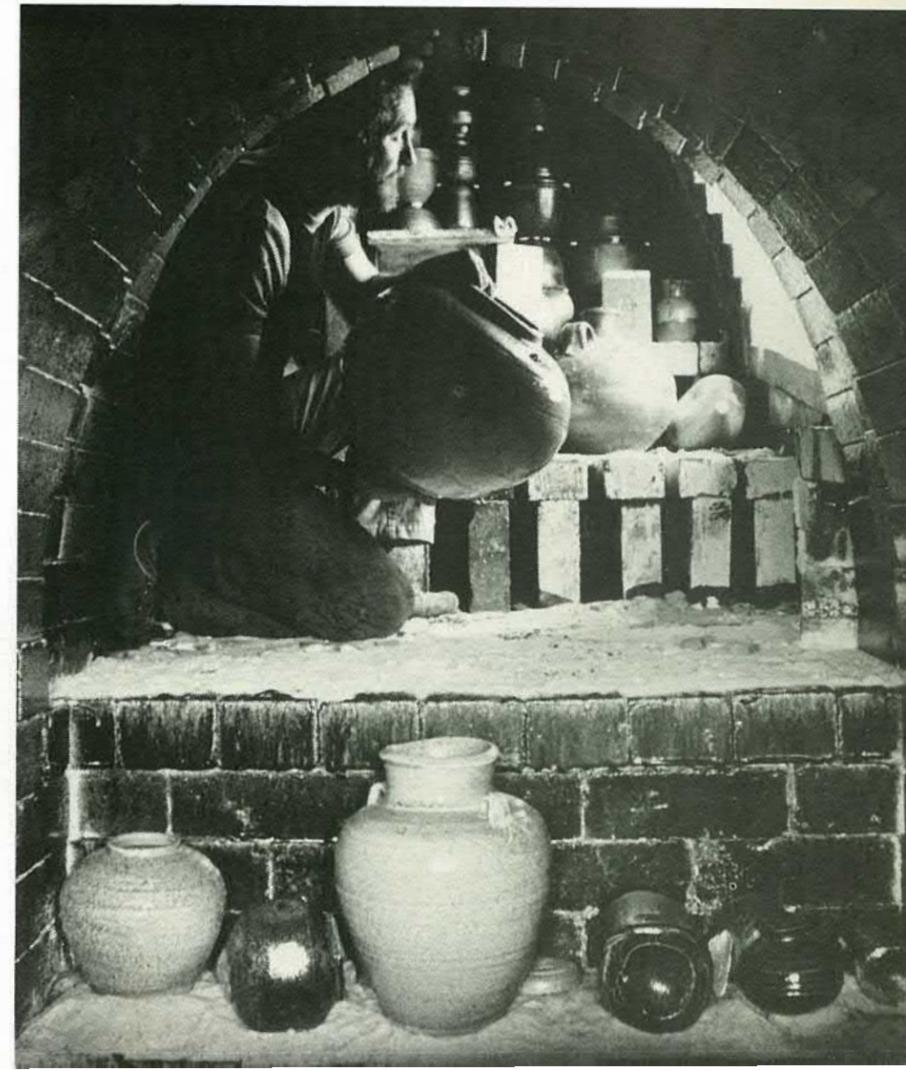
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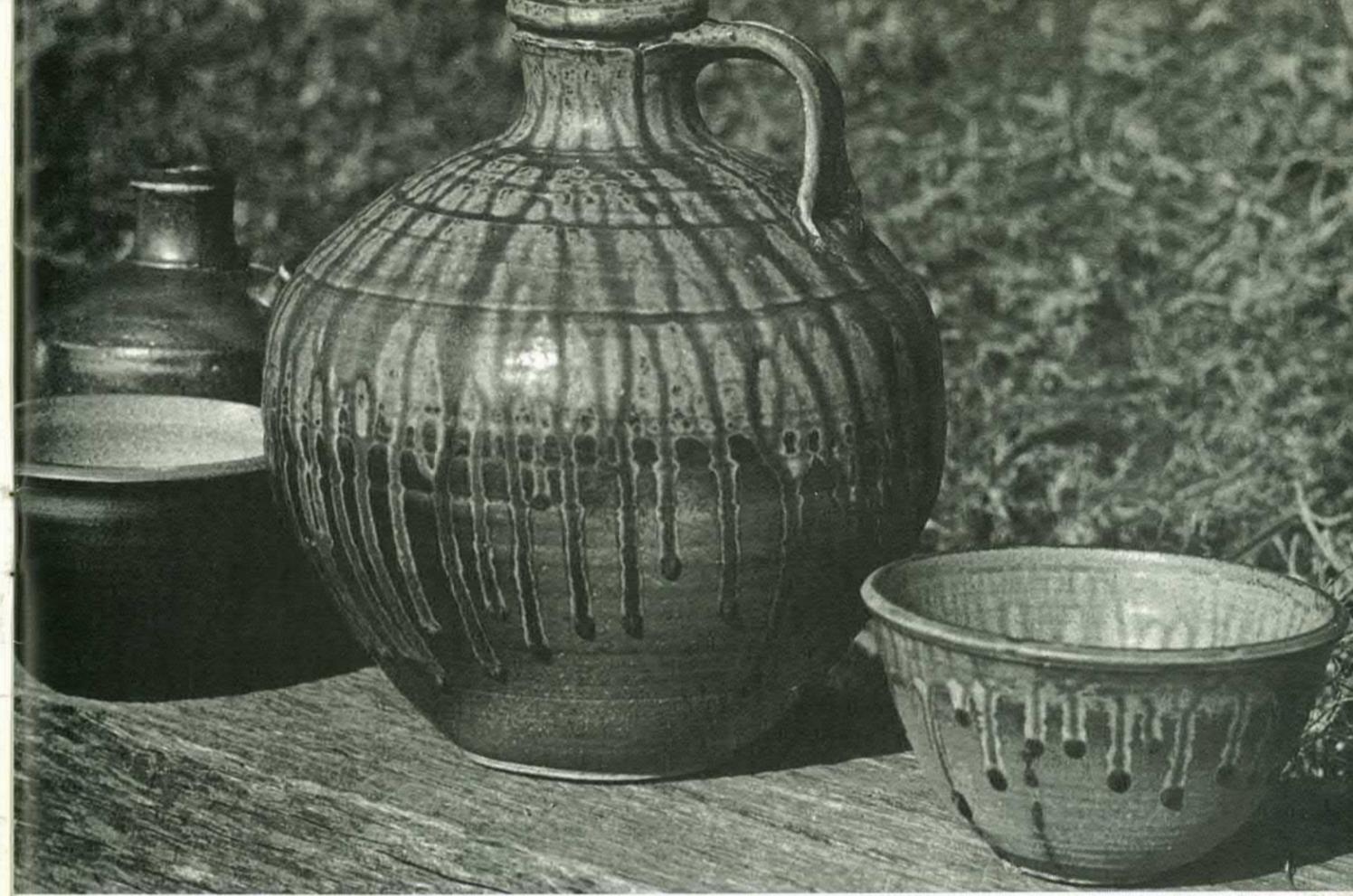
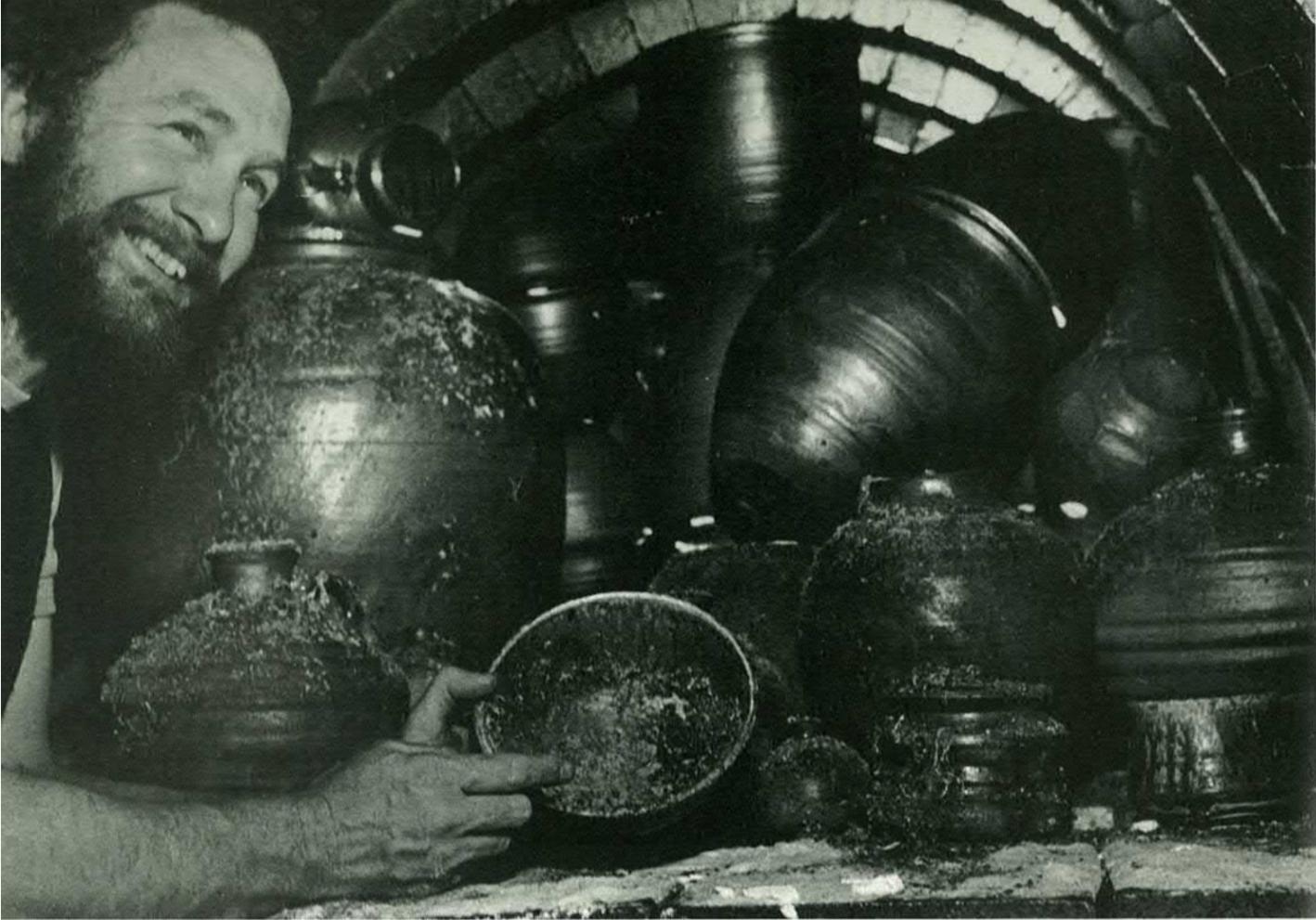
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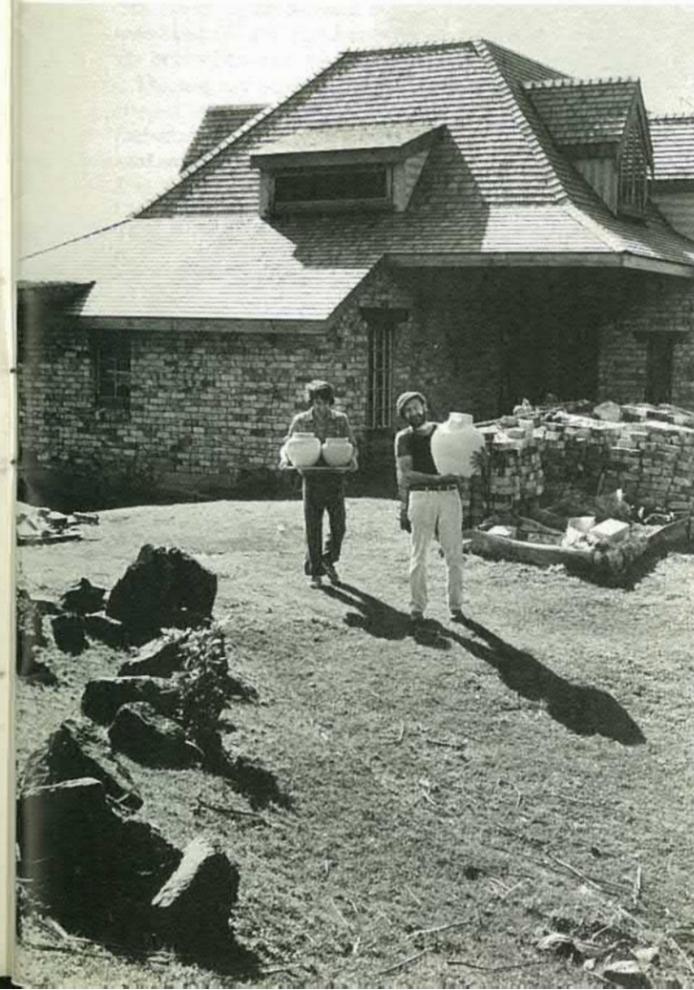
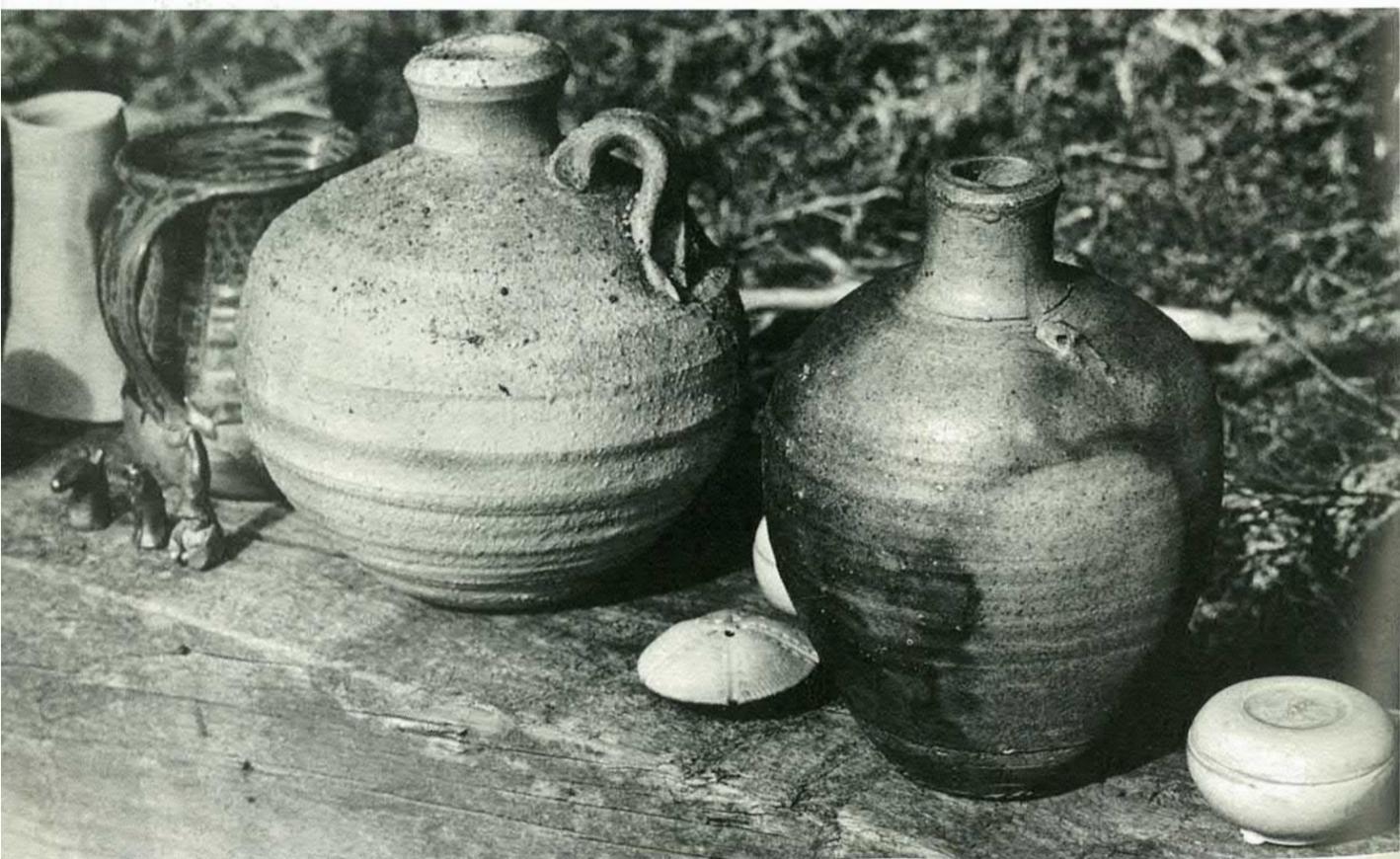


Steve Rumsey made several journeys to Chester Nealie's workshop at South Kaipara Heads to record his making and firing methods. The photographs show the whole process from making, stacking, firing with helper Peter, to the family, Hilary, Greg, Megan, and Bryn surveying the most recent kiln load.





"The kiln gods have been kind"



Paul Fisher

Paul Fisher lives with his family at Orari between Timaru and Ashburton on the flat Canterbury plains. He was introduced to pottery through WEA classes in Christchurch, Rita Ernsten and Michael Trumic being later teachers. Potting soon became a compelling passion which led him to workshops in Japan. He makes no apology for closely following the Japanese aesthetic in New Zealand. Paul has had several one man exhibitions and is represented in galleries in New Zealand, Japan and Britain.

In 1976 I travelled to Japan and this trip was to be a turning point in my attitude and approach to making pots. With the help of the Hamada family I was able to secure a place working at Daisei Gama in Mashiko. This kiln has been established 120 years and is producing traditional Mashiko tableware for everyday use. It has the distinction of having hired Shoji Hamada as a potter approximately 60 years ago when he first arrived in Mashiko.

The drop into Mashiko from my suburban environment in Christchurch was an amazing experience. Its a small village of 20,000 people, spread out on undulating country where 300 pottery shops and on the surrounding hills its easy to spot the kilns firing by the belching black smoke rising in the sky. At Daisei Gama I was able to make my own pots as well as traditional ware and the demands of repetition throwing and mass production was a lesson I could never have learnt at home. The kiln at Daisei was a giant with seven chambers 30' across and 5' x 6' high. It was bisqued and fired every month by six craftsmen and four kiln workers.

During my stay I also had the free run of the Hamada compound. I was fortunate to be able to watch the master making and decorating and to see his kiln in full flight. All this inspired me to carry on the tradition of highly glazed Mashiko ware and build my own wood tunnel kiln on a smaller scale.

On my return home we settled in Orari, an area with an abundance of excellent plastic stoneware clay and cheap firewood. I am using clay dug from a pit 15 km away at Kakahu, which is mixed 8-1 with silica sand available from the same pit. This mix is blunged for 30 minutes, boiled for two hours to remove water from the slip then stored ready for use. The clay is very high in alumina and has the same chemical analysis as that used during the Sung dynasty and at Shigaraki, Japan.

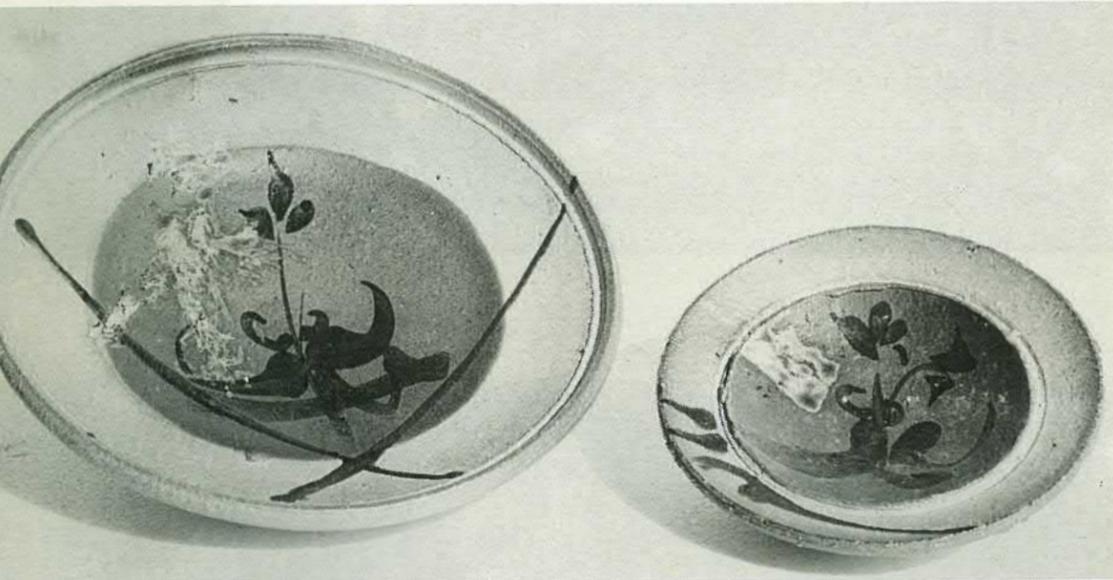
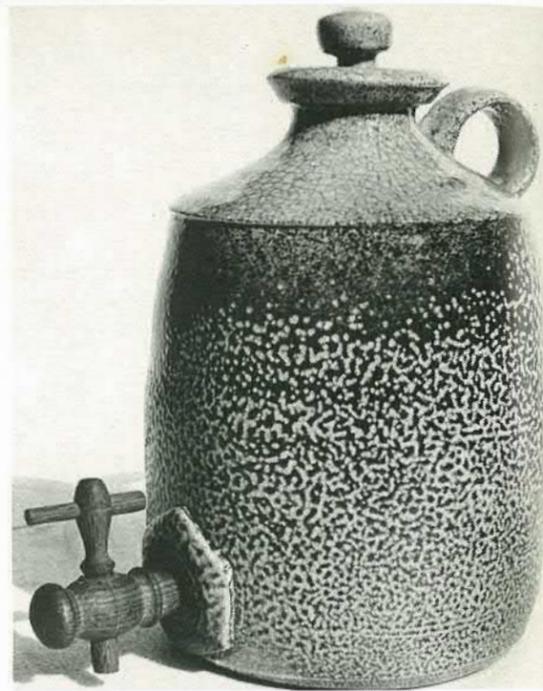
My kiln is a three chamber climbing kiln. It's constructed of approximately 4,000 unifrax fire bricks mortared together with our local Kakahu clay topped with an insulating layer of dirt, straw and clay mix. All chambers are built directly on the ground, the floor covered with 3-4 inches of Kakahu clay

then a layer of silica sand. It takes about 24 hours to fire all three chambers to cone 11. Its extremely economical, using 1½ cords of pine, which is about the same as my Brickell dutch oven design, a much smaller kiln I use for salting.

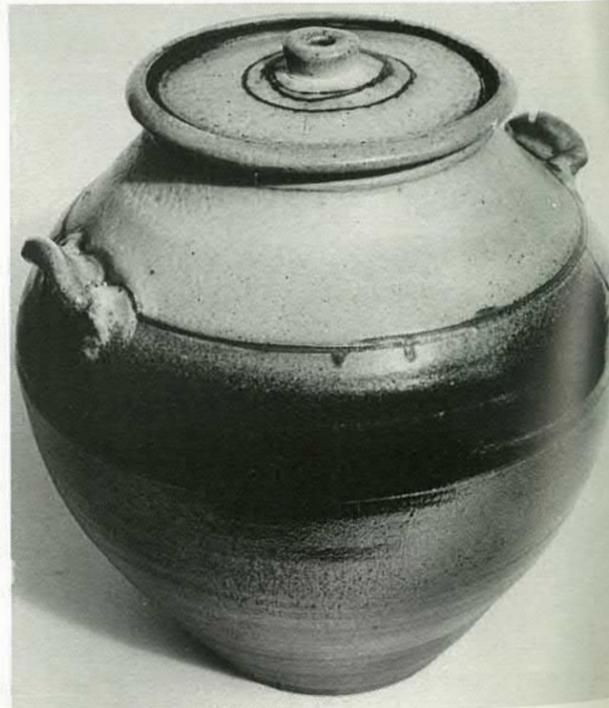
I still have a lot of traditional Mashiko in my veins and am working with slip glazes, ash, tenmoku and celadons. I make domestic ware and individual pieces.

I strongly believe a workshop environment is essential for learning the realities of making pots for a living, as opposed to a school system where students are not usually aware of the commitments to the craft, both financially and personally. I have another potter working with me at present and hope to expand my workshop to incorporate another three or four working potters. I see my workshop becoming a transit place, offering kiln facilities, clay workshop space, prior to potters setting up their own individual workshops.

Paul Fisher
Orari, State Highway 1
South Canterbury



Wood fired pots from NZ Craftworks Te Horo, photographed by Richard Hendry. Above left: Mark Tugendhaft, right Glen Beattie, left centre: John Anderson, below left: Andrew van der Putten, right: Paul Tobin.

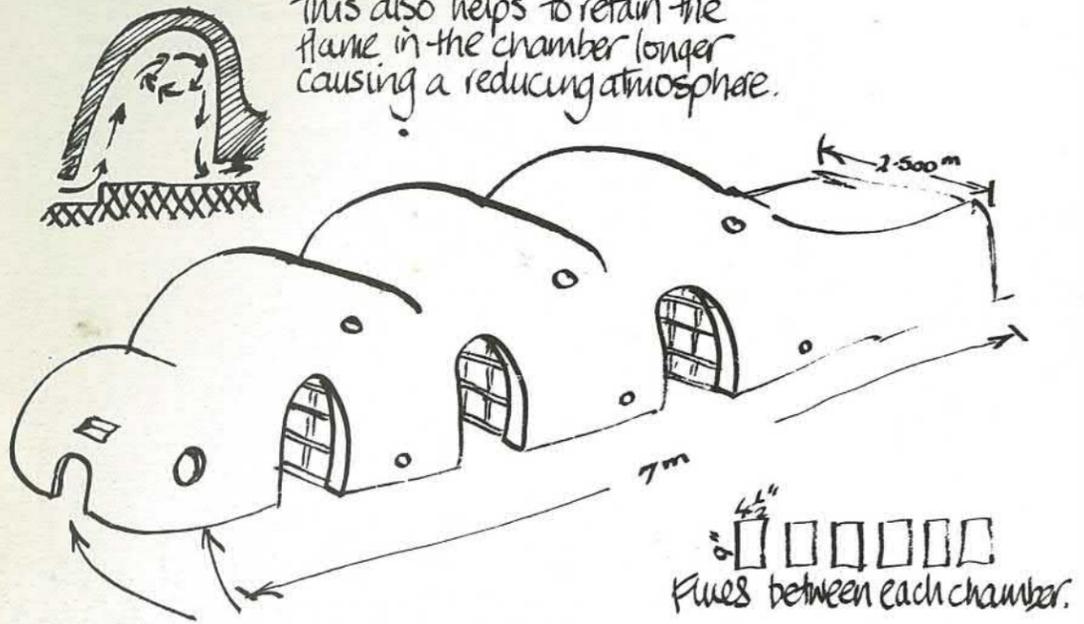


Pots made in 1976 on return from Japan, glazed with clear limestone

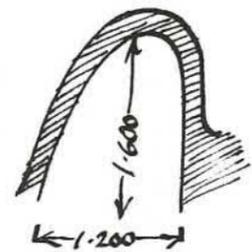


FISHER WANA - situated S.H.I., ORARI, Sth Canterbury.

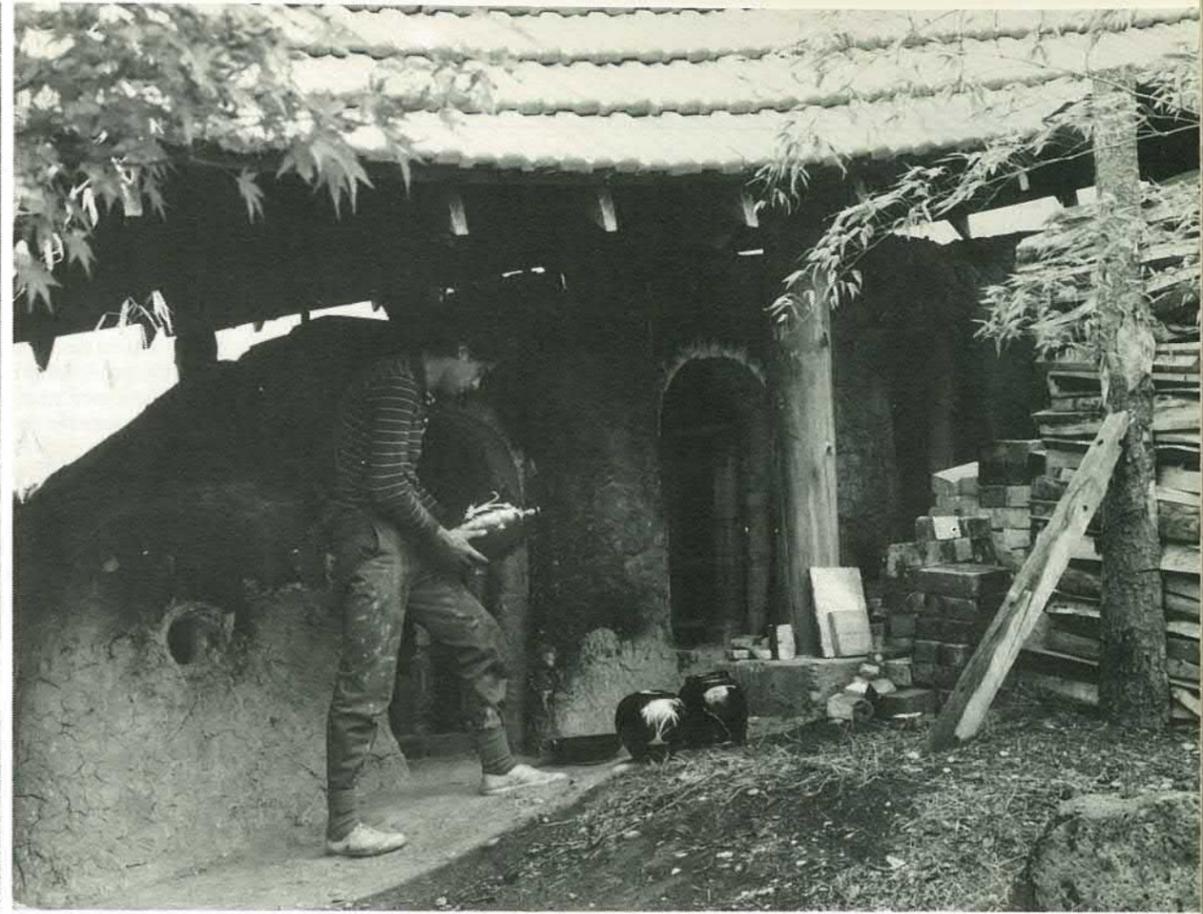
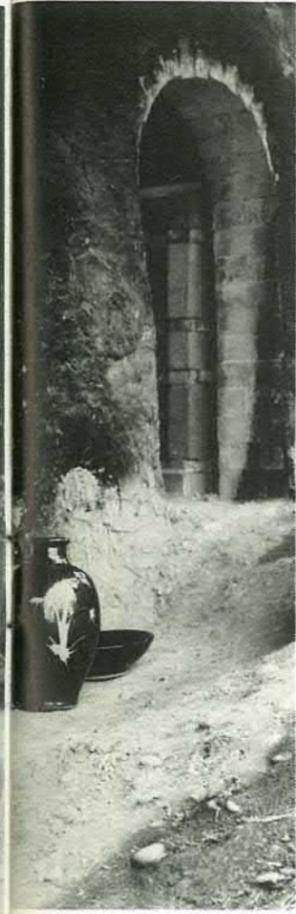
The arches are a double radii with the peak offset to the back in order to throw the force of the arch onto the upper wall. This also helps to retain the flame in the chamber longer causing a reducing atmosphere.



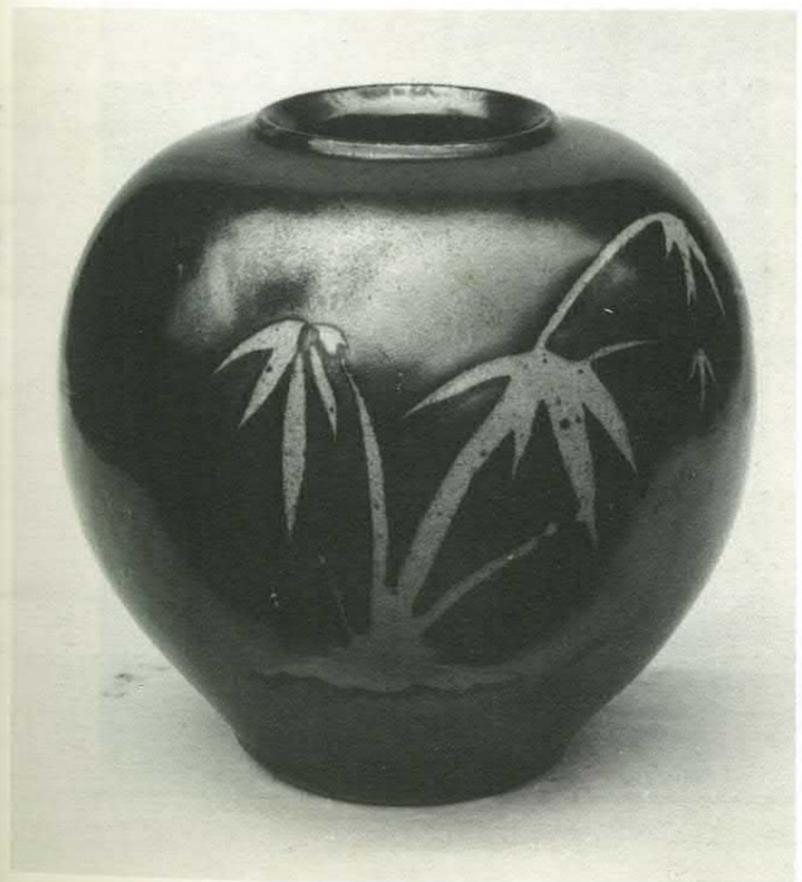
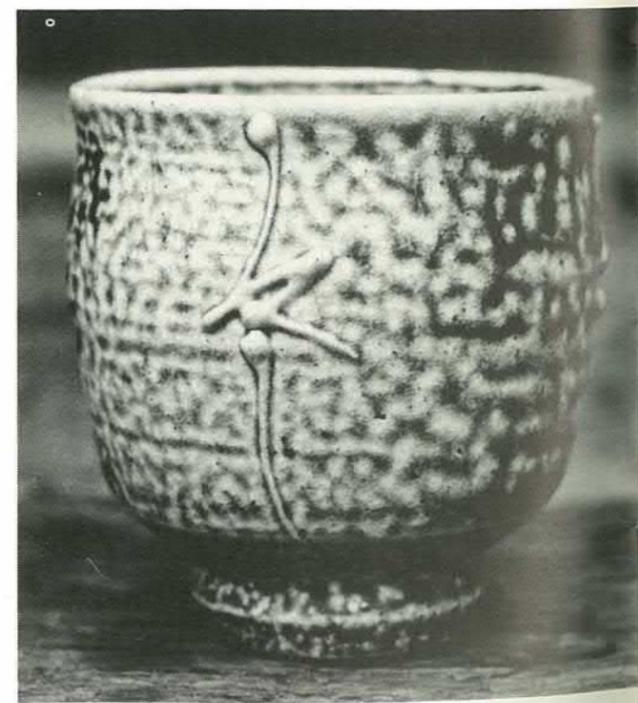
Firebox stoked until 1st chamber reaches 1200°C - approx 20 hrs, then side stoke each chamber for 1 hour to reach 1300°C.



Dimensions of inside chamber



Paul Fisher with recent work at his pottery in Orari, South Canterbury



Mark Lorimer on Bizen

After spending two and a half years living in Bizen—Mark working in a pottery and Maureen studying cotton weaving, indigo dyeing and in particular ikat weaving techniques—the Lorimers have been working at Driving Creek Potteries where Mark was making domestic ware New Zealand style. They are now establishing their own pottery nearby in Coromandel based on a Bizen type tunnel kiln to produce the type of work studied in Japan.

The predominant type of pottery found in Japan 800 years ago was an unglazed functional stoneware produced in simple tunnel kilns of up to 10 metres in length into the sides of mountains. To avoid cracking of the body, (a 60 to 70% silica content was common), long firings were necessary and the resulting fired effects from the buildup of ash ranged from spectacular reds, browns and blacks through to cloudy greys and blues and greens, quite frequently the full range appearing on the same pot.

Bizen, on the southern seaboard, the Inland Sea of central Honshu, is the last area producing this style of pottery in any quantity. In the other areas—Shigaraki, Tamba, Tokoname, Iga, Echizen, Suzu and Okinawa—the potters have mostly switched to glazed ware with only the odd individual potter continuing along the traditional line.

Prior to the 16th Century, Bizen produced mainly storage jars of all sizes some standing over a metre tall, burial urns, mortars and sake bottles. The potters, because of the tumultuous political circumstances throughout Japan, were forced to align themselves for protection and survival with the very strong temples in the area and the range of ware produced was directly dependent on that which the rough unplastic mountain clays would allow. Coiling and then finishing on a kickwheel seems to have been the production technique employed, with high losses of up to 50% during firing.

During the 16th century political stability came to Japan and Bizen potters moved down into the valleys where clay was found in abundance two metres under the ground. This clay was fine and very plastic and allowed a much wider range of ware to be produced. At the same time the Tea Ceremony was developing and the rustic nature of Bizen pottery fell into favour with the tea masters. The range of pottery extended from purely functional domestic ware into Tea Ceremony utensils—tea bowls, vases, water jars, tea caddies—and large sculptural pieces for the temples.

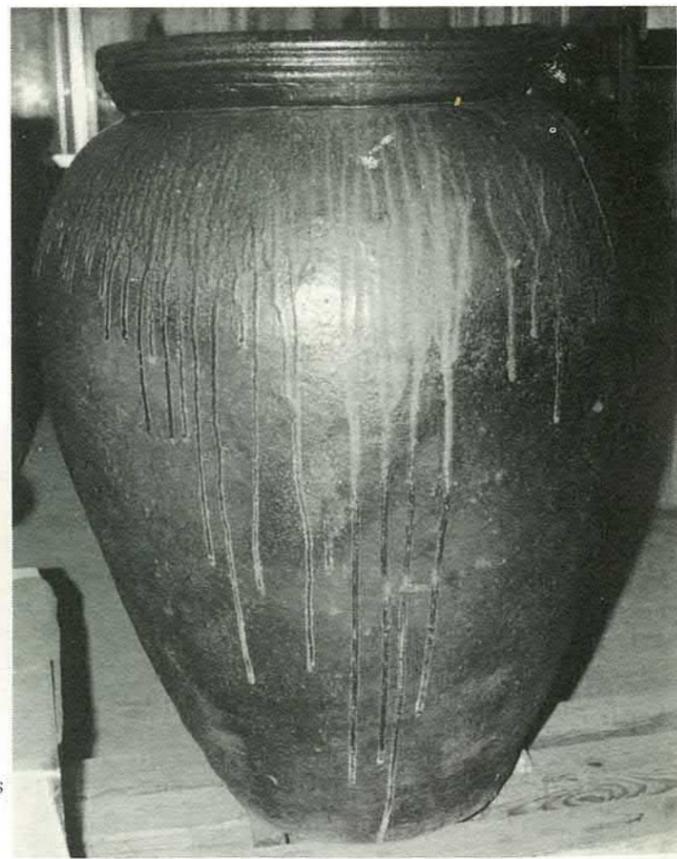
Kilns changed in size also, and during this time there were three large kilns in operation employing the population of Bizen. These kilns were 50 metres in length, 6 metres in width and 3 metres high and were still of the straight through, tunnel-type holding up to 30,000 pots. The firings took two months and were followed by a cooling period of one month. The fired surface effects on the ware were very important and through the use of saggars, shelves, wrapping of the pots in rice straw and simply stacking them one on top of the other subtle flashing and colourings resulted. Many of the pots from this period survive today and are highly prized collectors items.

More recently (about 150 years ago) the Noborigama (multichambered climbing kiln) came into use and it has now taken over as the most popular kiln built. Today Bizen workshops are predominantly small family affairs employing from one to six workers and some using both kinds of kiln. The days of large cooperative operations are long gone.

The ware produced is wide-ranging with an emphasis on Tea Ceremony utensils, vases, jars, bowls, platters, sake bottles and beakers and ever increasing numbers of pieces regarded as "works of art".

Clay is dug from under the ricefields, is processed in a somewhat labour intensive manner, then stored to dry for two years when it is hand crushed and the sandy clay separated from the pure, hard clay. The pure clay is slaked down and then dried out to throwing consistency in terra cotta dishes. This clay has a natural grog content and is then blended with the secondary clay which has had the sand washed out of it and been dried in a similar manner. The mixed clay is then stored (for ten years in some cases), to increase plasticity before being used. The blending of clays is generally done with the help of a pugmill but there are still workshops which have their apprentices foot-wedge the clay. The preparation of clay is most important as it is the quality of the clay, the size and quantity of the grog which adds to or detracts from the liveliness of the pot. With normal glazed ware the clay body is often completely concealed, but with flashings and ash-glazed effects on the Bizen pots the body shows through, the grog often rupturing the surface.

Throwing is generally done on electric wheels which allow for high productivity as well as large pots—jars are up to 20 kg, thrown in one piece.



Old Bizen Jar 1.25 metres high. 17th century

Kilns and Firing

As already mentioned, the kilns are of two types—multichambered and straight-through tunnel jobs.

These kilns are brick constructed and vary greatly in size; our workshop kiln had an internal width of 2.8 metres and an overall length of ten metres. They are a reduction kiln but quite often one chamber is reserved for oxidised effects. The reduction is enhanced by scattering charcoal amongst the pots; the places where the charcoal burns out against the body results in flashes of red, black, smokey greys and in special circumstances blues.

Kilns are usually four chambered and require eight to ten days to fire, with first firings often extending to 14 days. The ports for the insertion of the charcoal are located along the sides of each chamber and stacking is organised to allow a clean passage between the shelves, and across the kiln. The chambers themselves have no bagwalls but are stacked to guide the flame evenly to all corners—sufficient height from the floor to the first shelf being important to avoid temperature imbalance.

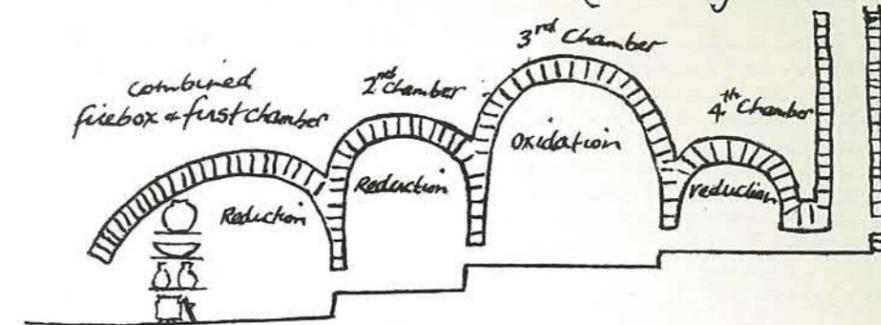
Today silicon carbide shelves have replaced the heavy thick fireclay shelves of the past with many pots stacked one on top of the other or leaning against another.

The wood used is Japanese Pine from the surrounding mountains cut to length, split and then banded with wire hoop for ease of handling. One bundle contains approximately six pieces of wood and measures 60 cm in length and 25 cm in diameter. One thousand of these bundles are needed for a firing and an additional 200 finer split bundles for the side stoking.

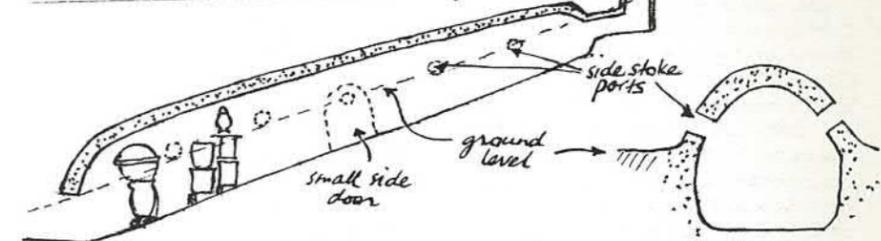
Firing commences with a slow warming and drying fire for two days through a 23 x 23 cm firemouth in the bottom of the door. A temporary "firebox" is built out from this mouth to keep the flame back off the pots, the ends of the burning wood being kept up by a metal bar across the "firebox" entrance.

The tempo of the firing increases until the pots on the first bung are visible when the main stoking port higher up the door is cracked open and carefully fed, starting with only three pieces of wood. The kiln is at a very delicate transition state prior to red heat and a sudden blast of cool air or flame is enough to cause cracking of the pots. The top firemouth now takes over although the lower one is still stoked and used as a source of primary air controlling the height of the embers inside the chamber. The amount of wood stoked increases until up to 40

Multichambered Climbing Kiln (Noborigama)



Mountain Tunnel Kiln (Anagama)

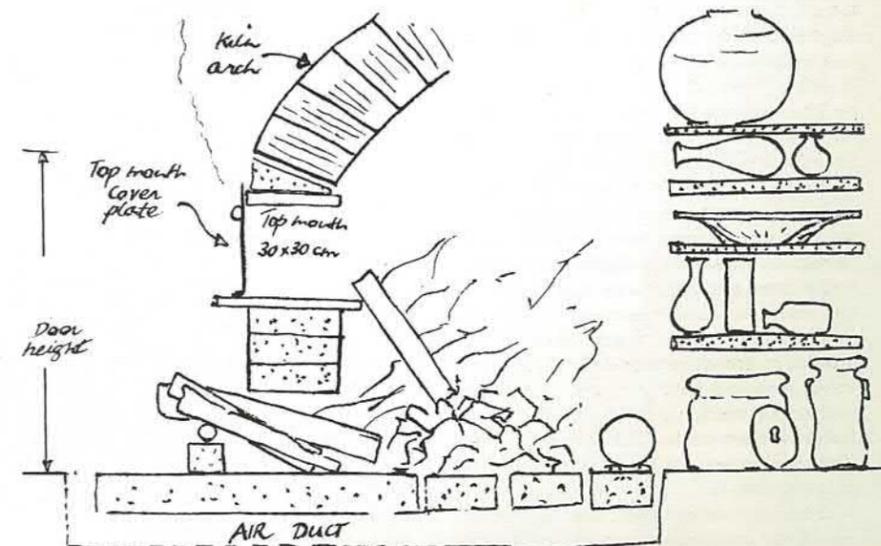


pieces are being thrown in at one time giving heavy reduction and pushing the heat to the back of the chamber and into the second one.

Side-stoking on the first chamber begins when the pots behind the ports (halfway down the chamber), are showing reflective qualities on their surfaces, and continues until the maturing temperatures are reached. In the workshop where I worked, no pyrometer or test rings were used, the only indicators of maturity being the runniness and reflective qualities of the molten ash and the colour of the chamber inside. Temperatures are usually around 1130-1150 but the

chamber colour is much brighter than expected at these temperatures by New Zealand standards, because of the long firing.

Once the pots are fully baked the 15 x 15 cm charcoal ports are opened and the extremely hot tiring job of balancing charcoal on flat long handled shovels and sprinkling it correctly among the pots begins. This took us an hour to complete on the large first chamber with a person on either side of the kiln shovelling. Once finished, all ports are sealed and the side stoking on the second chamber begins. This chamber required five to seven hours to fire and charcoal, the large oxidising



third chamber nine hours and the small final chamber one and a half hours.

These firings require a team of stokers; we had four, each working a six hour shift, although from the time the first chamber begins to approach maturity to the end of the firing all hands are needed to maintain the pace and the straight-through non-stop shift would sometimes extend to 55 hours. Following the firing, seven days were needed for the kiln to cool sufficiently to unstack.

Mountain Tunnel Kilns (Anagama)

This kiln is of the same type used in the early days of Bizen and was introduced to Japan by Korean potters. Generally they are 10-12 metres in length at the firebox end, 1-1.5 metres in width and height, tapering off towards the flue end. They are built on an incline of 15°-30° and are fired for oxidation and neutral fire effects. Fired for 8-10 days, they are side stoked once the front bung has reached temperature, (eg 7 hours might be required on the first port compared with only half an hour on the last).

The fired effects are usually lighter in colour than those from the "Noborigama". Greens, yellows and browns from ash deposition are characteristic with rich red fire lines on the pots which have been wrapped in rice straw and fired in saggars.

Although many kilns are now made of brick, the old construction methods of clay just moulded around a bamboo frame are still popular; many potters believe the fired effects from the clay kilns are superior—the highly reflective nature of the glazed brick surface being undesirable.

These kilns last for many years. The one I helped rebuild had been fired regularly for eighteen years before some areas of the crown began to collapse.

The construction clays were heavily grogged mountain clays the same as those used by the early potters for their pots and kilns. A blanket of rough rice-straw matting was spread over the bamboo frame and the clay mixed to a suitable consistency to avoid it slipping straight off, was plastered in layers up to a total thickness of 20 cm all over. As it dried the kiln was beaten periodically with wooden paddles to compress and strengthen it, helping to minimise cracking later on. The framing was then pulled out although some potters prefer to burn it out in the drying fire.

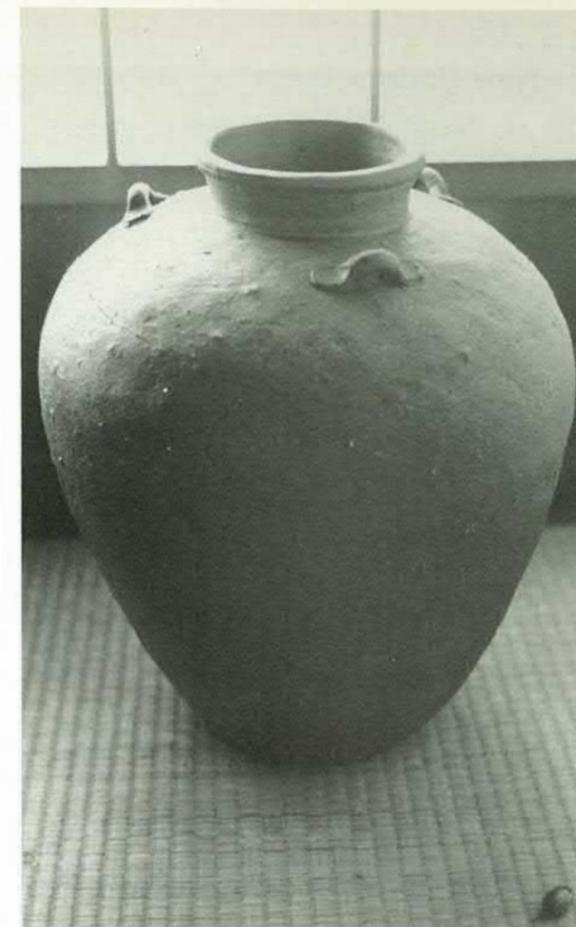
Because anagamas are generally used for oxidation/neutral fire effects charcoal is not used, although blishes

of grey/blue (characteristic charcoal effects) often result where the side stoking wood has burnt out against the sides of pots. Stacking is therefore much freer than that of charcoal fed noborigama with many saggars and pots stacked one on top of the other to a height 20 cm from the roof, care once again being taken to allow plenty of space for the flame passage along the floor.

These old construction and firing techniques used in Bizen appear to contrast sharply with mainstream Japanese life which on the surface is dominated by high technology. However on scratching beneath the surface

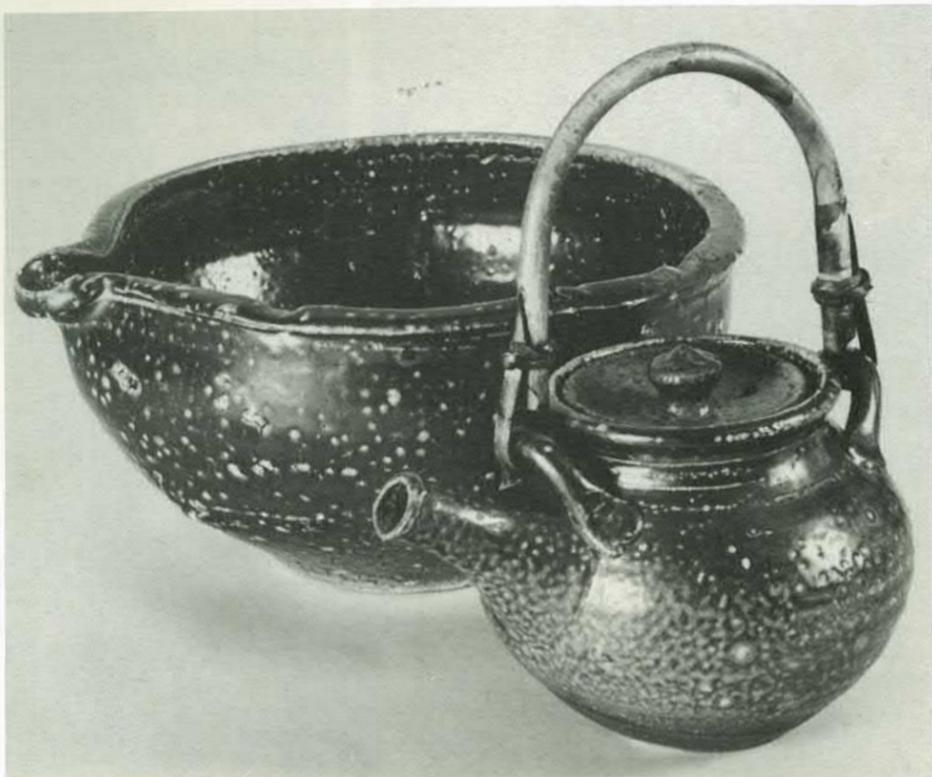
one runs into deeply-rooted tradition and these values are really the basis of the highly ordered Japanese society. The Japanese appreciation of beauty which is summed up in the words "wabi, sabi, shibui," (and have no exact English translation), refer to the roughness richness and depth of the natural world. It is this appreciation that makes Bizen pottery special to the population as a whole, has fostered a feeling of exclusiveness around it, and created the high prices the ware always fetches in the shops.

Mark Lorimer
Oxford Terrace
Coromandel



Above: pushing coals onto lower front pots of the first chamber of a noborigama. Below: Trails of burnt rice straw (almost pure silica) hanging from the pots. Right: Jar by Mark Lorimer made while working in Japan.





Salt glazed bowl and teapot shown at Auckland Studio Potters Exhibition.

photo: Howard Williams

Ian Smail

Over a ten year span Ian Smail has been accumulating firing experience with a number of kilns, some more successful than others. For lengthy periods, Warren Tippett and latterly Nicholas Stather have shared the workshop.

I learnt potting from Ann Ambler in 1972-73 and built myself a salt kiln and a small single chamber oil fired glost kiln. From there I went on to a larger double chamber oil kiln, which was never any good, then five years ago with Warren Tippett, built the present three chambered wood kiln, fired with the then popular Brickell Dutch oven type firebox. The kiln was designed for glost in the first two chambers and for salt glazing in the last chamber. It was a temperamental beast, taking up to 24 hours to fire, highly sensitive to stacking, and to the weather. I fired this kiln until the middle of this year, when some major alterations were called for.

I've now removed the front chamber and built a Bourry box type firebox on the front of the second chamber, so I have a kiln of two chambers, the second for salting, with a total capacity of approximately 100 cu. ft. The firebox is an adaptation of the Finch design. This kiln fires both chambers to top temperature (1300°C) in approximately 18 hours—the first chamber in 15 hours,

the second in three—and is very much easier than the Dutch oven on the original kiln (hail to their passing!). The Bourry box needs stoking only at 20 to 30 minute intervals and being entirely enclosed is so much nicer to be near.

In the front chamber I use simple feldspathic glazes (Shino type nepheline syenite or soda feldspar) rock glazes, and matt high magnesia glazes, also a lower firing iron glaze for those cold spots. Yes, we get those too! In addition I use a number of clay slips mainly based on ball clay and a local clay of high alumina content. In the salt chamber I use all the above and hope for lots of luck. The pots in the second chamber are usually fired raw with slip glazes inside, applied at the leather hard stage.

The pots are stacked on 22 x 14 shelves in the front chamber (four stacks about five ft high), and on 18 x 18 shelves (all silicon carbide shelves well coated with alumina china clay wash), in the second chamber. The pots in the first chamber are set straight on the shelves, some of the bowls set one inside the other with sea shells filled with clay or alumina/china mix in between. I do this even with the glazed bowls because it leaves a lovely scar. I often drop straw around both the glazed and slipped pots, but don't try

soaking the straw in salt—that can mean disaster. People read of potters in Japan soaking their straw in salt for extra effect. In my experience, and others too, the salt affects most New Zealand clay bodies in a most undesirable manner eating well into the pots during firing.

In the salt chamber the pots are on shells filled with alumina/china clay mix or on a flint grog from Northland. The bowls are often placed one inside the other with a small pot, teapot or jug, inside the top one.

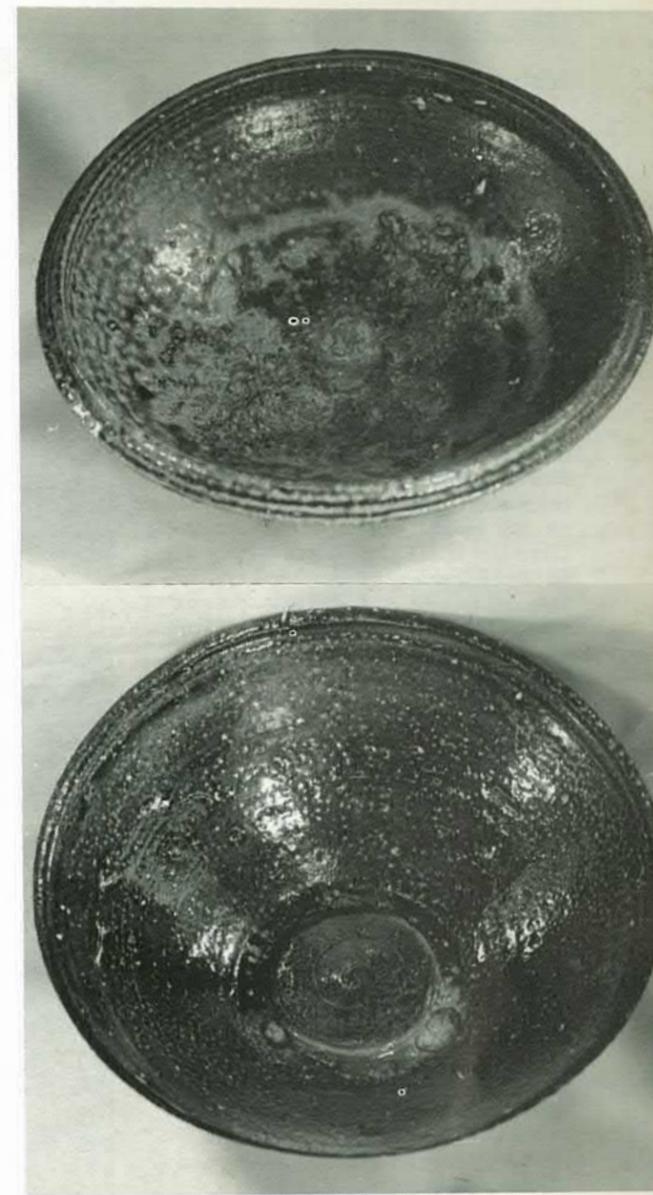
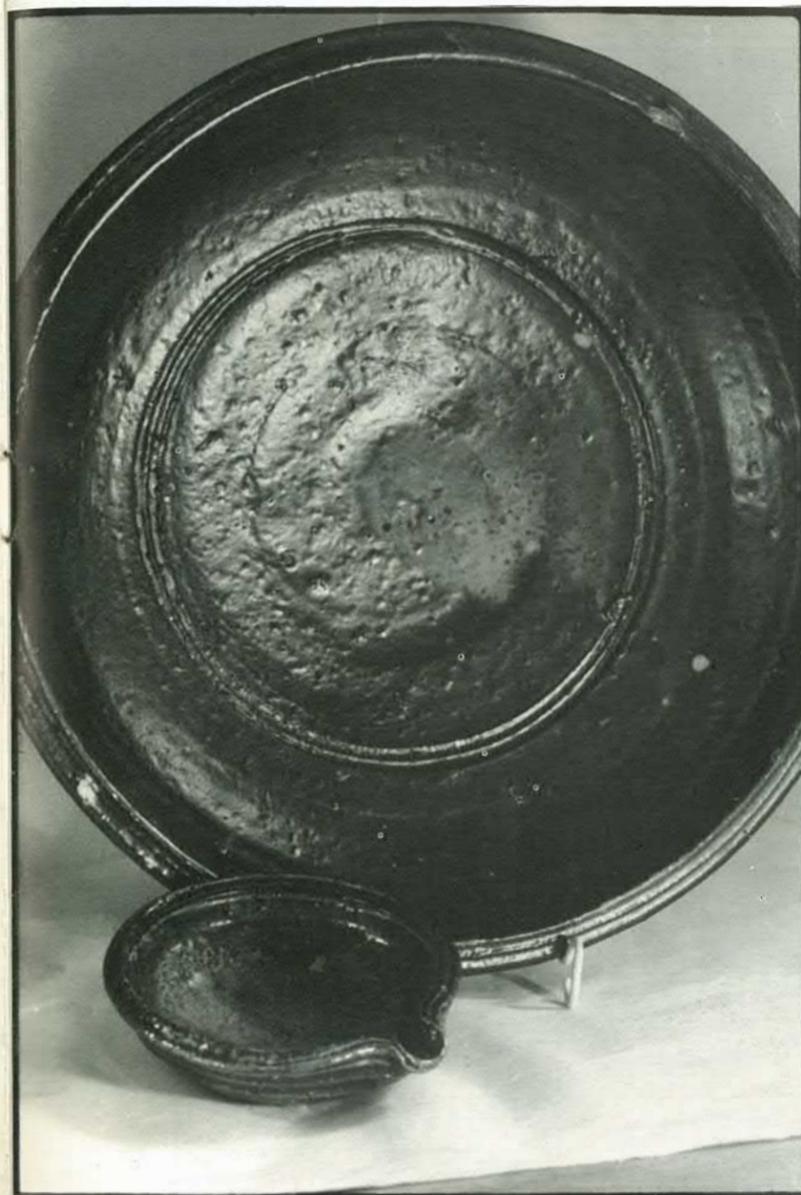
I have no magic to guarantee success with the salt kiln. As it is the second chamber, atmosphere control is difficult and the results are extremely varied—from brilliant to abysmal. The amount of salt is usually a four gallon bucketful or maybe two bucketful! The salt is thrown through any opening onto the pots especially the bowls.

The body I'm using at present is "Stichbury Mix" based on Crum powder and Huntly fireclay.

My advise to those embarking on a wood kiln is:

- get the wood really dry
- Have a mighty big chimney—remember this does all the work
- learn chainsaw maintenance!

(Further information on the Bourry firebox in NZ Potter Vol 23/2. eds)



Above left: Small bowl salt glazed, large shino type.
Right: salt glazed bowl interior and exterior.
Below right: bowls ash glazed and salt glazed.



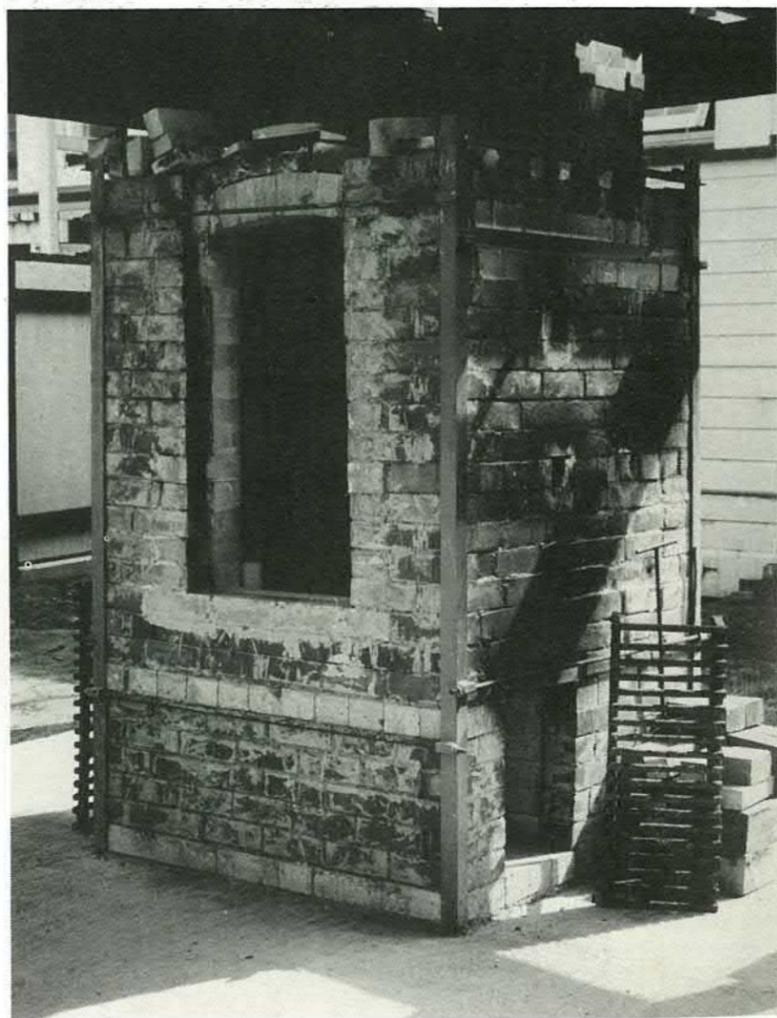
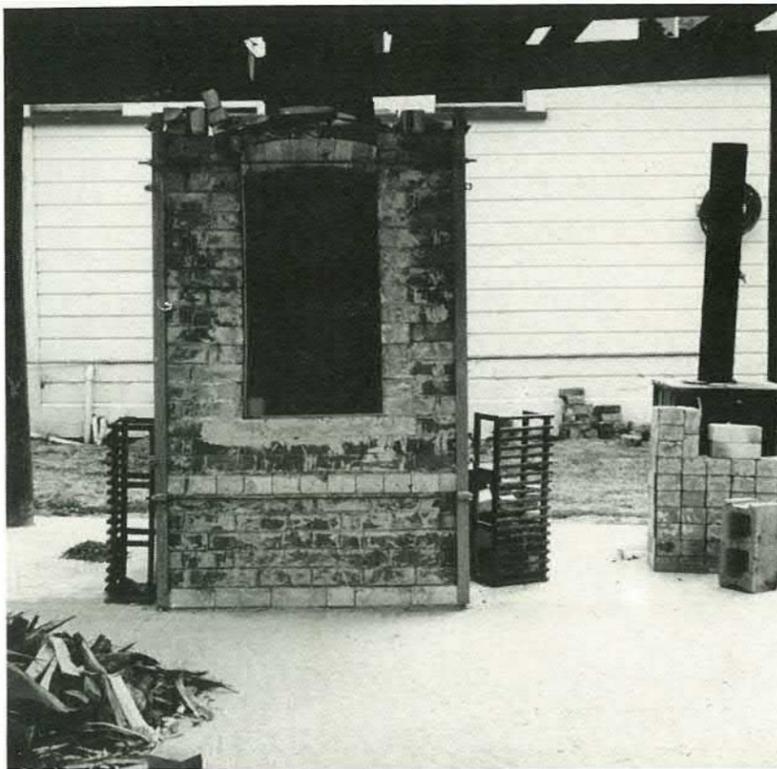
Nelson fast fire wood kiln

As part of the New Zealand Society of Potters clay weekend organised by the Nelson Potters Association last Labour weekend it was decided to build a permanent kiln at the Nelson Polytechnic; the Polytech to pay for the materials and Nelson Potters to design and build the kiln and to have access to it for workshops. A fine co-operative effort produced a really fast firing kiln (five hours).

The kiln design chosen was a small 25 cu. ft wood fuelled fast firing design by Californian Fred Olsen. It is a single chambered downdraught kiln with two opposing fireboxes under the chamber. To suit materials available to us we made some modifications. Chamber dimensions were altered to fit 12 x 18 shelves and the chamber floor was cast on high duty castable sections. The interior of the kiln chamber except for the floor is lined with low density insulating bricks; the fireboxes, flues and lower chimney are of hard firebrick; and the exterior of the kiln and most of the chimney is of red brick. The exterior steelwork and fire-grates were made at the Polytechnic. Our members completed the construction in half a dozen sessions.

The performance of the fired kiln was dramatic, stoneware firing comfortably in five hours, primarily because of the use of insulating bricks. An almost identical kiln constructed in Nelson entirely of firebricks takes at least twice as long to fire. Our kiln used a remarkably small amount of wood for a glost firing. The wood of course must be well prepared and dry. The method of firing is similar to that of most wood kilns except that the front firebox only, is fired until temperature reaches 550°C when the second one is lit and they are stoked alternately.

Bob Heatherbell
Brightwater
Nelson

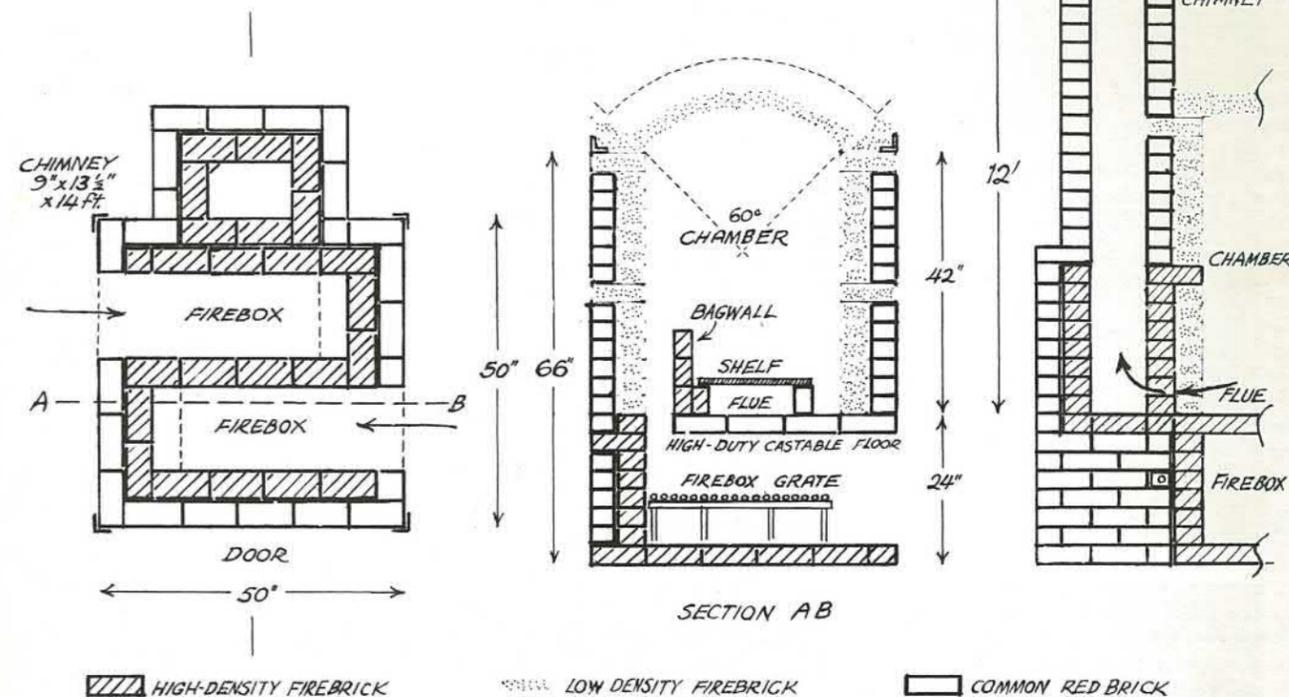


For other views on construction and firing wood kilns:

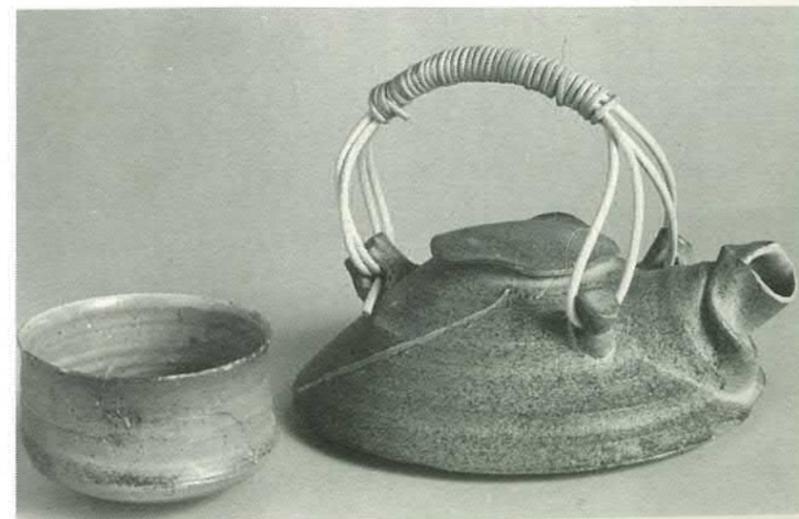
Fred Olsen "The Kiln Book" and Studio Potter 4 (2) Douglas Phillips Fast Fire Wood Kiln, Ceramic Review No. 63. (This appears to be a dandy little kiln of approx. 18 cu ft based on a Fred Olsen design).

Next issue more on wood kilns and firing: Bruce and Estelle Martin's anagama type kiln, Brian Gartside's low cost kiln using a barrow load of bricks, Paul Lorimer from Japan.

PROPOSED WOOD FIRED KILN FOR NELSON POLYTECHNIC



Woodfired domestic ware, left: Ian Firth from NZ Craftworks. right Mary Roehm, American potter, squat teapot with cup, celadon glaze interior only, shown at an exhibition in Craftsmen's gallery, Omaha, USA.



Clay clay and more clay

Winstones Ltd have now taken over two Nelson companies, making them by far the biggest clay manufacturers for craft potters in the country. At Winstones' invitation we made a visit to the Nelson factory where we were shown the mixing and blending procedure—from 15 types of clay collected from as far afield as Collingwood to Otago, up to six types of clay in any one body—and heard what additional products and services might be developed in the future. In June this year Winstones acquired the plant and assets of Potters Clay Ltd and have amalgamated the equipment with previously acquired Ian McPherson's Clay Ltd on the Potters Clay Parkers Road site. We were agreeably impressed by the entire operation—the combined output will be much greater than before and will provide a very much better service to potters. We obtained most satisfactory replies to our list of complaints, queries and suggestions.

Project Manager for Winstones Clay Division is John Carlson singularly suited

to the task of developing the business since he is a geologist whose M.Sc. thesis was on clay mineralogy, and who is himself a hobby potter. He therefore has a long association with clay, has a 'feel' for it and is aware of what potters expect of it by range and diversity. He personally throws and fires his own tests.

John Carlson reassures potters that there will be no immediate changes. All the traditional six McPherson's mixes will be offered, even "Slab Clay" which is still mixed by hand in the original manner. The full "Potters Clay" range is also available. Efforts will be made to improve on these clays to attempt to provide what potters want. Most important of all will be improved quality control.

"Winstones involvement will bring a new dimension to the quality control of raw materials and product testing. Our policy is:—

- (i) All clay winning to be supervised by a geologist.

- (ii) Clay stockpiles to be prepared up to two years ahead of utilisation. Stockpiles to be tested for particle size and test firing, to confirm consistency.
- (iii) Clay to be made in distinct batches and all bags numbered.
- (iv) Each batch will be test fired prior to release for sale.
- (v) Test firing in reduction only for stoneware.
- (vi) Specification minimum water absorptions adhered to.

Clay not suitable for potters (from our works) will be clearly labelled with its intended use, i.e. for specified low firing purposes, modelling etc."

John Carlson

John Carlson will contribute an article about clay mineralogy for potters in next issue.

Well known to a generation of New Zealand potters as a reliable source of studio potters clay, Ian McPherson has made a substantial contribution to New Zealand potting. His continued association with Winstones clay works in Parkers Road follows the tradition he set when helped by Mirek Smisek and Roy Cowan he developed a series of clay bodies to suit studio potters when there was no other source of prepared clay in New Zealand.

Cone comparison

Steve Rumsey

Potters often have a problem comparing one make of cone with those of another.

Each manufacturer publishes a scale of "temperature equivalents" for his cones, but this does not agree with the temperature scale of another manufacturer, when the same amount of "heat/work" is done!

For example, if we place the following three cones in a kiln together and heat them up, they will all go down together:

- Orton Cone 6
- Old Harrison H5
- Seger Cone 4a

In spite of this fact, each manufacturer gives a different "temperature equivalent" for his cone:

- Orton 6 = 1222°C
- Old Harrison H5 = 1180°C
- Seger 4a = 1195°C

Reading across the table below, you can compare the relative squatting points in practice for three makes of cone, at a temperature rise of 150°C/Hr (new Harrison/Bell cones appear to be similar to Orton):

CONE COMPARISON TABLE

OLD HARRISON 'H' CONES	SEGER CONES	ORTON CONES
1300°C (10)	1300 (9)	1305 (10)
1290	1290	1300
1280 (9)	1280 (8)	1290
1270	1270	1280 (9)
1260	1260 (7)	1270
1250 (8)	1250	1263 (8)
1240	1240 (6a)	1260
1230 (7)	1230	1250
1220	1220	1240 (7)
1210	1215 (5a)	1230
1200 (6)	1210	1222 (6)
1190	1200	
1180 (5)	1195 (4a)	

12 Potters, 20 years

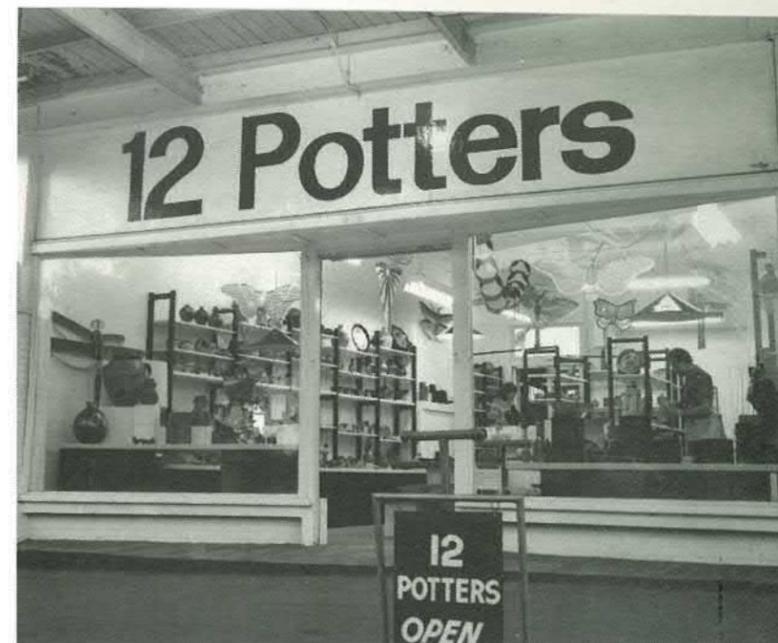
In 1962 in the embryo years of public interest in hand-produced pottery in New Zealand a group of twelve very amateur Auckland potters decided they needed somewhere to sell their pots, and outlets were few. So why not start a shop of their own? One was found in Mt Albert, painted and fitted with shelving for a total cost of £6 a member, and at a rent of £2 a week. The group opened their shop, called "12 potters" and established the first potters co-operative, run and stocked by the potters themselves. The original members were: Olive Jones, Mavis Robinson, Paula King, Betty Rapson, Jean Weir, Betty Colson, Nan Troup, Lil Walcott, Joey Marshall, Margaret Milne, Tony Valentine, Jim Palmer.

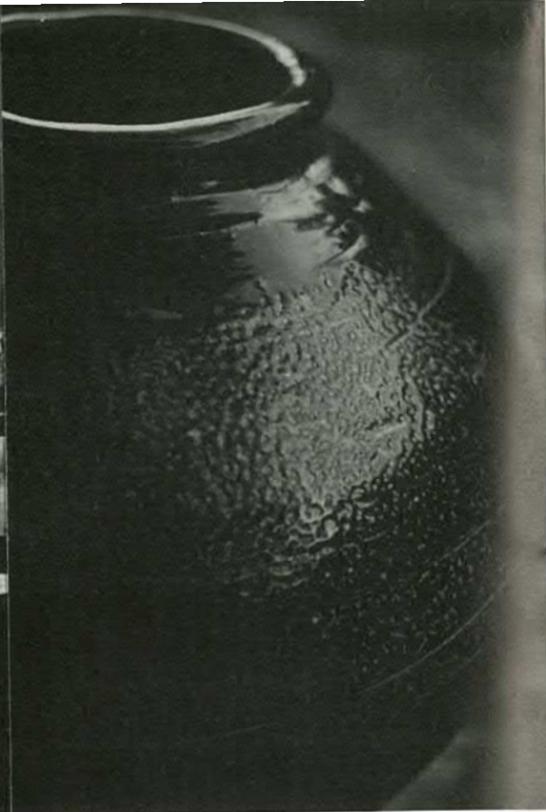
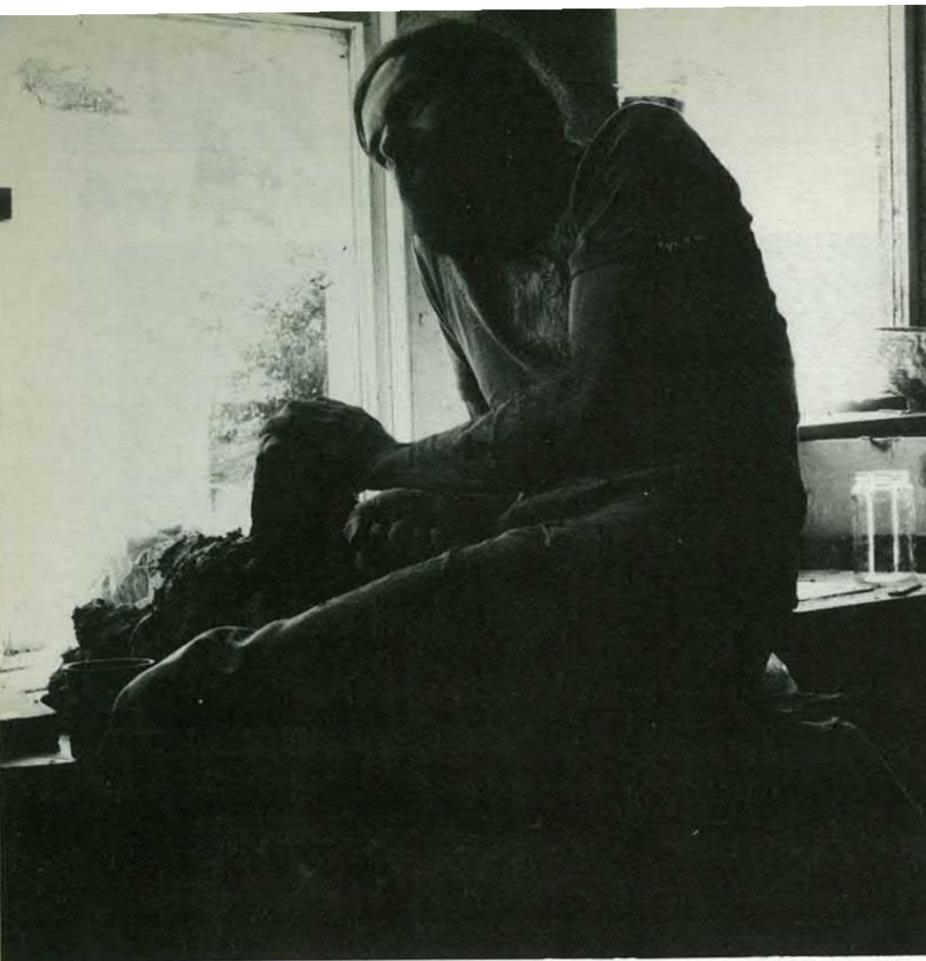
Eight were exhibiting members of the first formed New Zealand Society of Potters 1963, and most had gained their interest and experience from weekend schools and evening classes, which were held in several secondary schools. All but one of the original group fired in electric kilns and were more or less restricted to a range of earthenware, oxidised stoneware, and some necklaces and pendants.

Three premises later, the group now includes a number of full-time potters and twenty five people share the co-operative selling facility at Upland Road Shopping Centre, Remuera. A wide range of potting styles is evident in the work displayed—stoneware and porcelain, domestic and fantastic—a reflection of the maturity and skill and development of critical taste that marks the present day New Zealand potting scene.

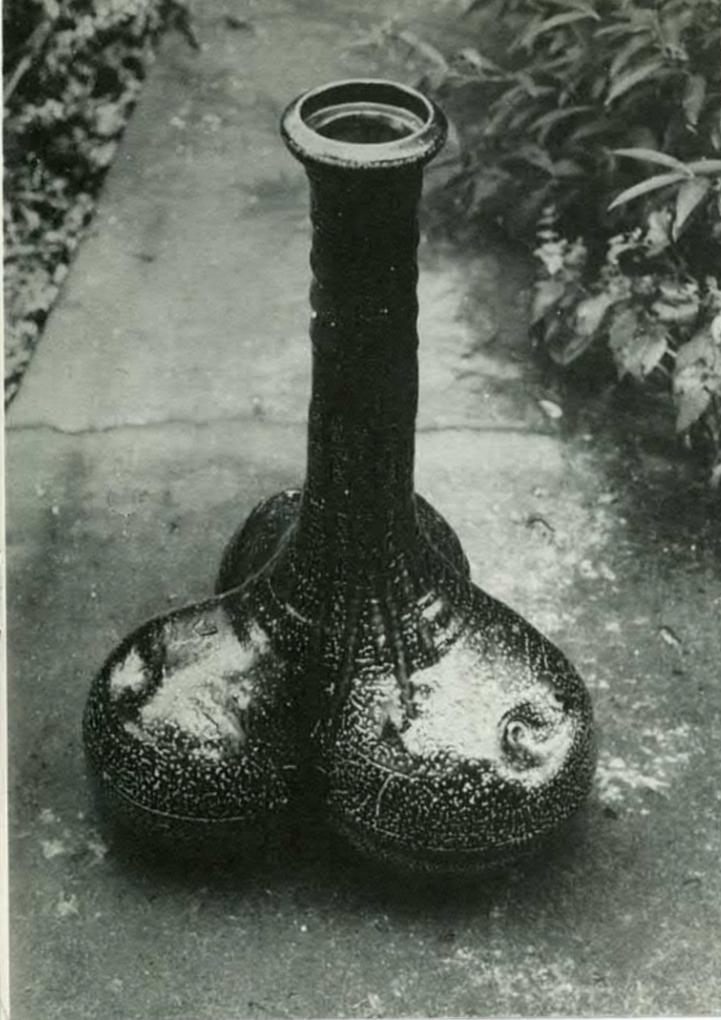
Four of the originals are still with the group and the present membership ranges from the well known and established to the relative newcomer. Altogether more than 50 potters have benefitted from the group's activity over the last 20 years. Present 25 members are: Catherine Anselmi, Elizabeth Beechey, Roger Brittain, Gill Carruthers, Julia Colman, Ruth Court, Lex Dawson, Maurice Dawson, Moyra Elliott, Garry Elliott, Margaret Grayson, Olive Jones, Pauline Jones, Alan Kestle, Paul King, Alison Laird, Beverley Luxton, Margaret Milne, John Parker, Cecilia Parkinson, Dave Parton, Cliff Smith, Ditty Staple, Tony Valentine, Diana Wyler.

12 Potters Shop in Remuera gives a sophisticated image carried through to the black/white wrapping paper. Right: some of the members taking a lunch break at a shared workshop.

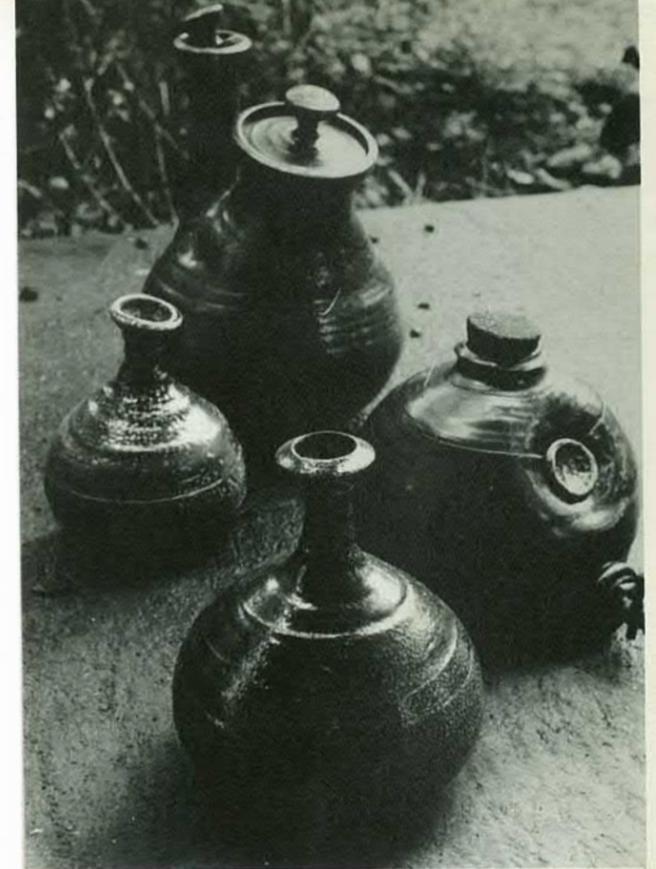




BLACK BEECH JAR
650 MM W X 700 MM H.
COBALT ROCK SLIP.



MORPHEUS 900 MM W X 1 M H. COBALT ASH SLIP. ↑ MOON POT 200 MM H. ↓ COPPER IRON SLIP.



SNORKEL GRAIN JAR, WINE JAR,
TWO BOTTLES — ASH' & IRON SLIP.

JOHN MADDEN JOHN MADDEN JOHN MADDEN SALT GLAZER



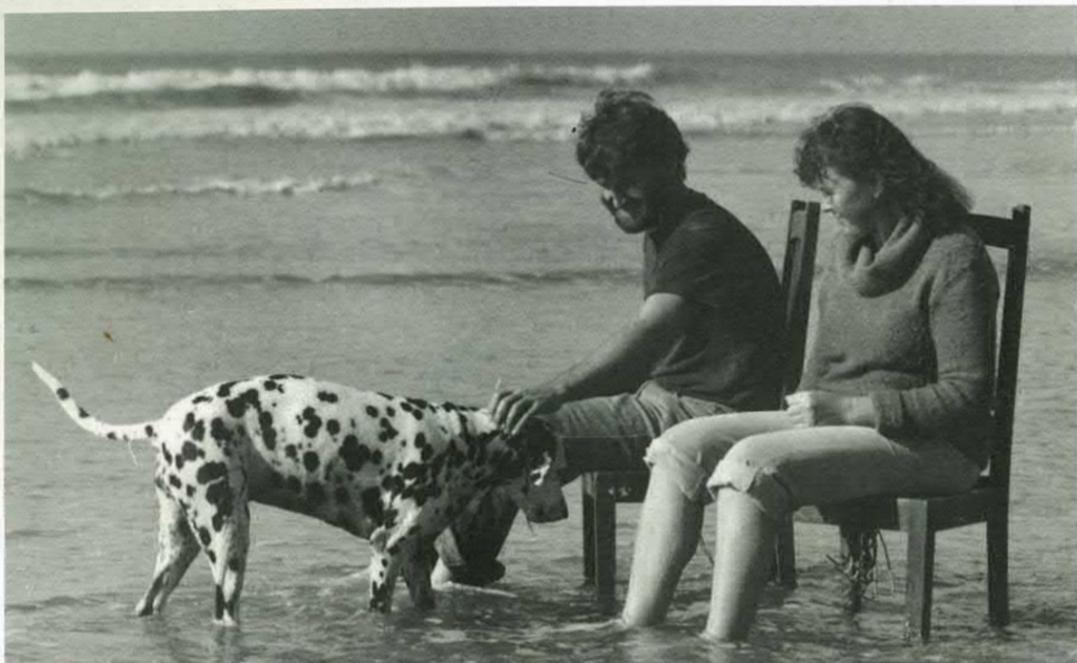
SEA GOD 700 MM W X 600 MM H.
COPPER COBALT ROCK SLIP.



SALT GLAZE — AN EXCITING SOMETIMES DEVASTATING AFFAIR HAS CAPTIVATED ME FOR 4 1/2 YEARS. MY STUDIO-KILNS ARE IN THE WHANGAMOA VALLEY 35 MRS N.E. OF NELSON I SHARE A BIG OLD 90 YR OLD HOUSE WITH CHRISTINE GREGORY PAINTER. THE DAY BEGINS EARLY WITH A 6 AM START AND IN THE STUDIO BY 8 THROUGH TO 5-6 PM SOMETIMES WORKING INTO THE NIGHT.

I LIKE TO WORK UP A RHYTHM WITH A CERTAIN TENSION AND OVER-THE-EDGE FEELING PUSHING MYSELF INTO THE UNEXPECTED

FIRE — I LOVE RAW FIRE & FLAMES. I HAVE 2 SALT KILNS, A 100 CM FT WOOD-KILN BARRY BRICKELL DITCH-OVEN DESIGN & A 70 CM FT COAL-FIRED KILN. THE WOOD KILN TAKES ABOUT 16 HRS UP TO 1300°C & 3 HRS SALTING. GOOD DISCIPLINE & A REALLY EXCITING DAY. I FIRE THE POTS RAW SO MUCH CARE IS TAKEN AT THE EARLY STAGE WITH BIG POTS. RAW GLAZING SAVES TIME & ENERGY, LIFTING BIG SCULPTURES AROUND IS NO JOY.



John and Anne Crawford On the West Coast

John and Anne Crawford are well established in comparative isolation from many of the South Island's potters at Hector, 20 miles north of Westport in Westland.

We chose to establish our pottery in Westland because there was a good supply of raw materials, but above all because it is remote. This was important in our case as we'd both previously been part of a big workshop. The remoteness would make us look in to our own resources and create something of our own.

My interest in potting was sparked by Yvonne Rust at Greymouth High School. Yvonne arranged for me to take up an apprenticeship at Waimea Craft Pottery in Nelson where I spent five years doing everything from clay making to packing finished pots. Here I found a friendly supportive atmosphere, everyone worked together making pots to a high degree of craftsmanship and good old fashioned pride. Anne worked alongside me at Waimea. After five years Jack Laird could see we were ready for our own studio and was helpful in our move to establish ourselves at Hector in 1974.

At first we put emphasis on making things that were "different" from those made at Waimea, but it soon became obvious that being different did not necessarily mean an improvement in quality. We evaluated the pots and the aspects we liked about them were emphasised. Decorative brushwork had been applied to most items relevant or not, (at the time I thought it was). A gut

feeling for our materials was still not evident in our work.

Slowly our environment began to influence us. A series of landscape decorations were started in 1979 when friends moved to Sydney. In the clear sky each morning we could see a tiny silver fleck leaving behind a vapour trail—the Wellington Sydney flight. The arrow and the jet trail became a symbol of our friend's departure and provided us with a decorative theme, depicted as an arrow above the outlines of our mountain and sea landscape. This would require careful handling and new forms would have to be designed to take such decoration. Yet still this bold landscape decoration looked "applied"—an integrated wholeness had not been achieved satisfactorily.

I selected portions of the landscape and drew them, cutting detail to a minimum, and a new concept of seeing things began to emerge. I found it a good exercise to cut the drawing up with scissors and reassemble the pieces to give a fractured look, but still retain the same feeling of power and abruptness our landscape gives. The image was no longer a landscape, but basic lines easily incorporated as design concepts to fit a form. The pots were now designed as a whole and not with decoration "added". Some pots did not need decoration at all while others required it to point up their best features. Combinations of techniques were developed for some of the new pots. Some needed to be coiled, some with coil and slab areas, others paper resist decoration.

As we progress through each stage of making, but especially after glaze firing we try to evaluate what we are doing and why, and then ask ourselves if this was the type of pot we set out to make.

The longer I pot the more aware I am that there are no set rules or criteria for judging pots. There is only you and honest commitment to the materials with which you work.

Our aim is to try to create pots that have a sense of wholeness about them and reflect a sense of caring craftsmanship. We look upon our work as part of us and not simply as a job. We both do seven days a week although our hours are not over long—9 to 5 pm on average.

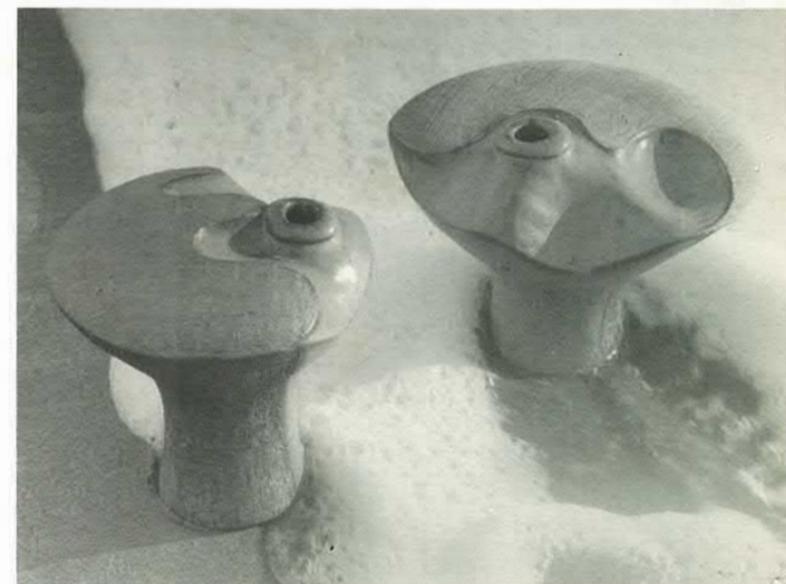
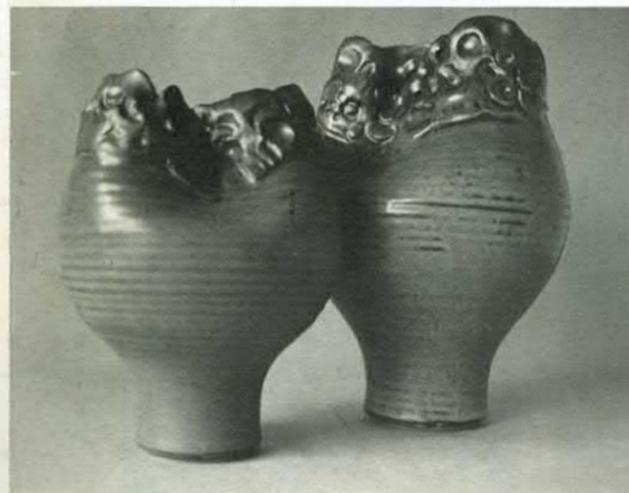
Recently we opened our own gallery in Westport, twenty miles from Hector. We leased a shop in a good position with a large window and relatively good lighting. The interior had to be completely refitted. In tune with our bush surroundings we painted the ceiling olive green, lined the wall with rough sawn rimu from the local mill erected in herring bone pattern. White display cubes and a group of three shelving units made for walls. Off white fitted carpet brings out the honey colour of the unoiled rimu. This has provided the first opportunity to display our work to best advantage and we have been pleased with the response from visitors and the local community. We have displayed other local crafts in our large front window and hope other craftspeople will take advantage of it.



Glazes are conventional stoneware with high felspar content. The grey/white body makes use of local china clay with a high talc content from Westport. For domestic ware the body is raku II from Nelson. The largest of the above pots is 26 cm high. Below left and right: Pots inspired by the environment shown at CSA Gallery Christchurch. Blue/green glaze.



Later work shown at Alicat Gallery, Auckland in a recent exhibition from Westland potters. All decorated pottery above has strong blue orange or brown brushwork on a grey/white clay body.



Feeling Free

John Sweden has lived and worked at Centrepoin Community, Albany Auckland since its formation five years ago. Here he explains his potting philosophy, which cannot be divorced from his total outlook on living. He contributes to our technical information from his experience in firing with a large lpg fibre kiln and some glaze recipes and glazing methods.

Pottery for me is guts and clay. I want my pots to be touched as well as looked at. Perhaps the people who buy my pots will find something within them that goes beyond ownership, fashion or intellect. It can happen. A pot can be functional and it can also provide a doorway into the unconscious where all creativity has its roots.

Pots are capable of conveying incredible intrinsic energy. Its all there—the stress and movement of making and firing. When I look at a pot I can tell a lot about the potter. To me many of the pots made today are intellectual head trips. They seem fragile, untouchable, behind-glass expressions that attract the eye but make no appeal to the heart. They are clever, but cold.

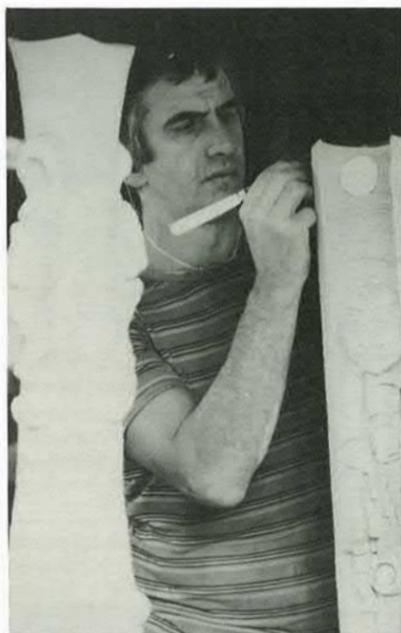
My personal way of seeing pottery, creativity and the world, has changed. I'm discovering that there isn't any right way; there's just whatever process I happen to be involved in at the time. I'm not against tradition, I admire greatly the Eastern craftsmen for their total dedication and mastery. But tradition can become a god. The technique and achievement can be more important than the maker. I have no wish to do it that way.

I taught myself to pot at Timatanga, another community, where I used a diesel kiln and a wood kiln. After trying many occupations, including precision engineering, advertising and landscape contracting, pottery seemed to offer what I needed physically and emotionally. There were up to eight of us at times, at various stages in developing our potting skills. Each person's energy was valuable and although our methods of sorting out our interpersonal difficulties were not very developed, it was an important time for me.

From Timatanga my partner and I moved to Bethell's Beach, a windy spot on Auckland's west coast. A large diesel kiln was available, but I used mainly a wood kiln for our bread and butter production. It was here I worked with Warren Tippett and although I was probably not a good "apprentice", I learnt a great deal from Warren. We

then moved to Centrepoin to establish a completely new pottery.

After eight years of potting, I guess the way I now make, see and feel is intimately connected with how I look on myself as a person. I do not now hide from my own feelings. I have made some pretty depressed pots, thrown some pretty angry bowls and have often hidden my insecurity behind knowledge-possessiveness, jealousy and secrecy. Now that I have changed the way I perceive people, pots and the rest of the world, my life has become a lot simpler and much more fun. I have the use of the entire community with its facilities and equipment, but I own nothing. That in itself is a tremendous relief.



I like working here. Our pottery is a beautiful building where I'm free to explore absolutely anything. There are no limitations except those I impose on myself. I still make the usual bread and butter work, but more and more I can leave that and try something new.

Our clay body

We have an excellent stoneware body with high green strength giving a warm toast colour at C10 reduction. The high Bentonite content of the fireclay results in slightly more than average shrinkage, but this is outweighed by the mixer-to-wheel convenience and excellent plasticity of the freshly made body.

Kopuku fireclay+	36%
Crum clay	36%

John Sweden

Albany

NZ Ball clay—	18%
NZ feldspar—	10%

+ We went directly to the Kopuku coal mine and arranged, after testing, to have 60 tonnes of fireclay refined and bagged for us by Mintech Ltd.

Glazes

Every time I visited the Auckland Museum, I was magnetically drawn to the superb blue and white pottery from Japan and the East. I realised it would be futile to try to duplicate their process, but I did want a glaze that would approach its richness, simplicity and purity.

Our stoneware is based on a number of iron-rich clays, and the glaze needed to interact with this body, without losing depth and whiteness. Over the years, two basic recipes have evolved.

A Chinese white glaze stoneware C9-II reduction

Stetley potash feldspar—	36
NZ china clay (ultrafine)—	27
Calcite—	6
Dolomite—	12
Silica—	19

I love the softness of this glaze. It has a tactile, smooth, easy-to-clean surface that is superb for brushwork over and under. It comes to life when applied thickly over stoneware bodies, but also works well over white slip if you wish to eliminate iron speckles. If understaining, the stain used needs adequate flux to avoid occasional crawling away from the decoration. I use this glaze and the one below with a cobalt-based slip for brushwork and wax resist. It is stable and suitable for in-glaze colours.

B Opaque white glaze C10-12 stoneware reduction

Stetley potash feldspar—	40
NZ china clay (ultrafine)—	20
Calcite—	14
Silica—	18

This is an excellent glaze for decoration in the high temperature range. It is stable, likes being medium to thick on our body, and needs medium to heavy reduction for best appearance and finish.

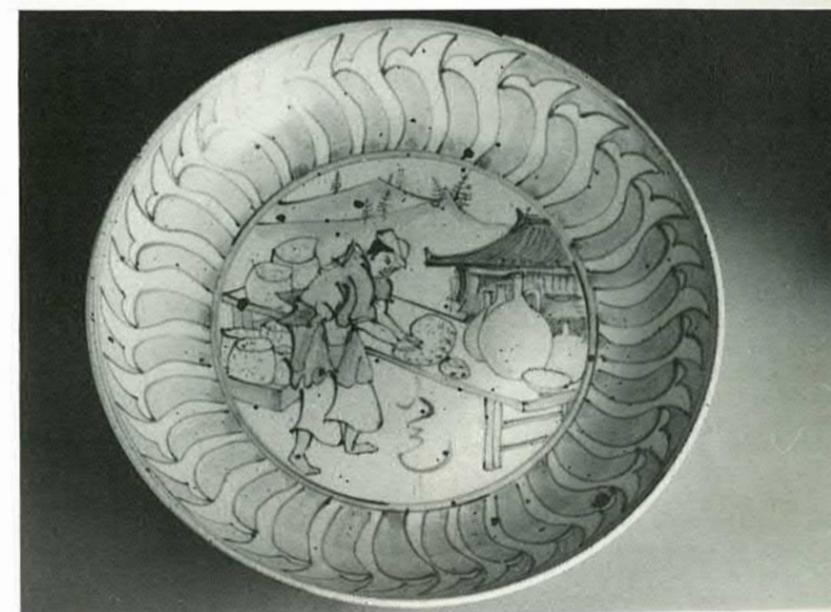
The following two glazes are also favourites and offer an entire world for exploration. When used sensitively they give a crisp brilliance and flawless surface.

C stoneware/porcelain glaze C9-12 reduction

Stetley potash feldspar—	26
NZ china clay (ultrafine)—	13
Woollastonite—	27
NZ ball clay—	6
Talc—	3
Silica—	26

Equally suitable for stoneware and porcelain this is one of the few glazes I have found that will not craze on Podmore's porcelain at higher temperatures when applied from thin to medium. It is excellent for over and under brushwork in blue or iron slip. When applied thickly to an iron-rich body it forms a soft, deep pale-green celadon. Over porcelain carving, and over graffito through pale slip onto a darker body, it is ideal.

A startlingly beautiful combination may be obtained when used with wax-resist and the following Japanese-style overglaze.



D Khaki C 9-12 reduction

English Cornwall stone—	60.00
NZ ball clay—	16.00
Woollastonite—	7.00
Talc—	6.00
Silica—	11.00
Titanium—	0.40
Red iron oxide—	7.00

note: the imported so called Blue Cornwall stone has quite a high moisture content so I usually add 20% to the batch weight.

To work well this glaze requires thickness, and will range from deep olive-green to brown, red-brown and

grey black. It can be a flawless, stable glaze that comes to life over glaze C.

All of the above glazes may be dipped, poured, brushed and sprayed.

I'm fussy about my wax for wax resist. I prefer paraffin wax diluted with kerosene until the cooled wax loses its hard, brittle surface and becomes slightly soft and tacky. I have tried a number of brushes but none have withstood the rigours of hot wax as well as a 1/2 inch black bristled household paintbrush. I apply the wax quite hot from an old electric frypan with a Sillinanite shelf lid—the lid avoids asphixiation from kerosene fumes. Don't leave the brush in hot wax between use!



Cottage industry

The way we work together in the pottery, as in the other community industries, is based on the way we live. People are more important than anything we do, so there is strong emphasis on communication and sharing our feelings with one another. This sort of honesty in the pottery as anywhere else, is difficult at times as for example when negative feelings arise. I certainly find that I can't make beautiful pots when resentful or hostile. The big change in my potting therefore has been making the transition from working and living in almost total inward and outward isolation to being with people who are at once individuals, potters, workmates and members of my large extended family, (150 adults, teenagers, children and babies at the moment).

We work closely together, sharing the housekeeping tasks, but each following his own path and timetable. Our kilns are not yet used to full capacity so there is always a firing slot available. Clay mixes which vary a little from potter to potter are the responsibility of the individual. Usually we buy our raw materials in bulk—up to 50 tonnes. Sales are wholesale to shops from Northland to Rotorua; we were not granted permission from our local council to retail so there are no kiln-side sales as such apart from a few "seconds". All property is held in common. Earnings are paid into the Trust. There are no wages. I get \$1 a week pocket money which is more than I need. I find it a great relief not to be involved in property, mortgages, food etc. There is so much more energy available for living creatively.



Silk-stencilled garment by Sue Holmes—dress designer

At present there are four potters. This changes from time to time as someone leaves or wants to join us. About twelve people have been associated with our pottery. There are no secrets. If someone discovers something new it is shared with those who want to use it, so change can happen quickly. At times there is a sort of creative chaos, but one which is full of learning opportunities.

Communities have acquired the unfortunate image of dope-smoking, laid-back hippies who never do any real work. Centrepoint people are mostly high-energy self-motivated individuals who enjoy talking about ideas, but who also get on with it and do it. The financial backing is provided by the Trust's collective assets, savings and earnings has meant we have been able to build the sort of building we want without having to scrounge and

scrimp as many communities do. Our pottery for instance is exceedingly well equipped.

Most of our many visitors do not wish to live this closely together and with the sort of commitment we have here, however they can take away with them those aspects that are useful to them at the time and apply them in their own lives.

Next to the pottery we are currently building a second large craft building to house most of our other crafts and industries: silk-screen printed fabrics, dress design, silk scarves and sarongs, puzzles, wooden toys, fashion accessories, weight-lifting equipment, carpentry and metalwork. The horticultural business includes a big tree nursery. As well there is the counselling and therapy side of the community; an important activity offering weekend and week-long workshops.

New Zealand Potter

Pottery: Approximately 2300 sq ft with adjacent wood and material storage: climbing kiln shed.

Equipment: Electric wheels, slab roller, extruder, pug mill and ribbon blender. Spray booth.

Kilns: 68 cu ft LPG Top-hat fibre kiln. 4 burners to 1320°C in about 14 hours. Fired about twice weekly. 1800 litre LPG tank supply.

300 cu ft 3-chamber wood fired climbing kiln. Dutch oven fired with pine slabs to 1320°C.

5 cu ft 3-phase computer-controlled electric kiln.

Clays: Kopuku fireclay-blend stoneware.

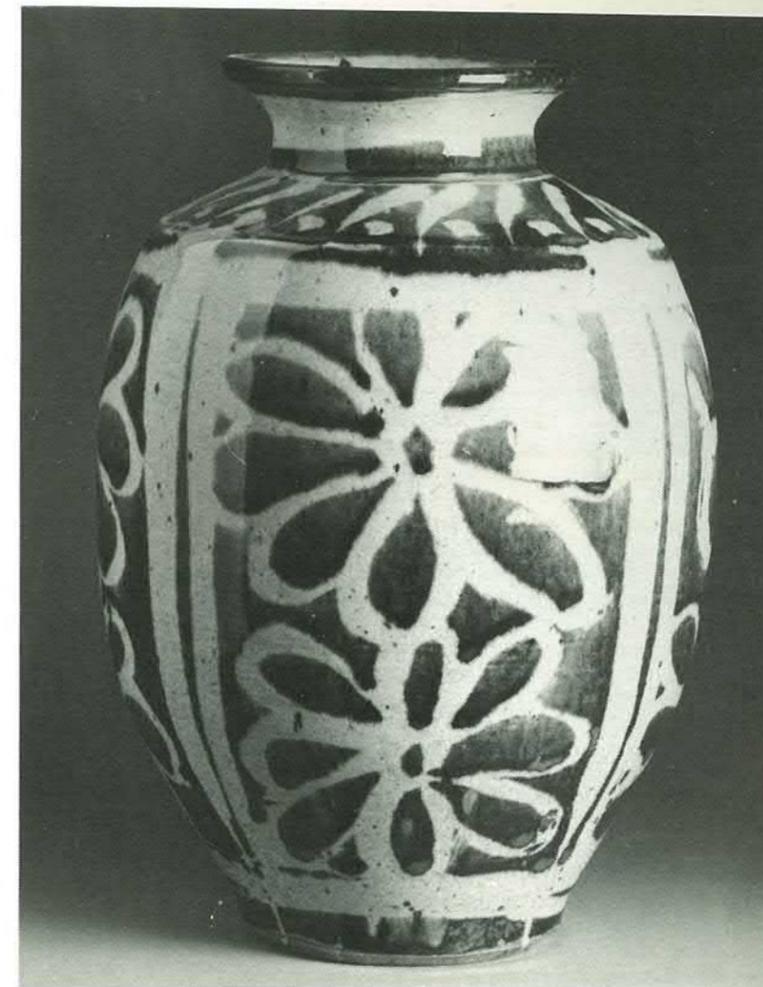
Terracotta. Imported and home-made porcelain.

Pots: Domestic stoneware and porcelain. Handbuilt porcelain, sculptural stoneware. Press-moulded flatware. Murals.

Glazes: Oriental-type recipes. Oxidation and reduction. Crystalline glazes. Barium glazes.

Techniques: Sgraffito, wax resist, brush-work, carving, inlay, slip trailing, glaze on glaze decoration. On-glaze lustres and fuming.

Centrepoint Community is half an hour's drive from Auckland city over the harbour bridge and half a kilometre from Albany township at the end of Mills Lane off Oteha Valley Road. Saturday afternoon is open time for friends and visitors. Weekday visitors welcome by arrangement. Box 35 Albany, phone 4159-468.



Some experiences with a 68 cu ft top hat LPG fibre kiln

John Sweden

The kiln was made for us by an Auckland manufacturer about four years ago. We have had between 75 and 100 firings to 1300°C. reduction. The manufacturer based our design on the Australian CSIRO top hat kiln featured some years ago in 'Pottery in Australia'.

That was a 37 cu ft kiln, arrived at after much research and testing with the aim of producing an energy-efficient kiln capable of being fired six to seven times a week on about 18 to 28 litres of LPG per firing to 1300°C. Our average has been about one or two firings a week, but they have been, until recently, anything but energy-efficient. Doubling the kiln size and increasing the BTU's of the burners does not preclude that it will be efficient. Sure it fires. But at a price.

Over the years, our firings have averaged 18 hours, the longest being 26 hours. Soak times to even the wide variance in top and base temperatures have averaged about 6 to 8 hours. Our LPG consumption per firing has been

about 10 to 12% of an 1800 litre tank. Expensive! Pot losses due to bloating, blistering, oxidation etc were considerable, due to the high base temperature (cone 12 plus).

I realise that we had a number of other choices, such as using lower-temperature glazes higher up in the stack, but that seemed like a cop-out.

Here is a synthesis of our experiences with our kiln, and the modifications carried out in the past 6 months. My special thanks to Max Murray of the Caulfield Institute of Technology in Australia for his generous help with our kiln problems, and to Chris Cockell for being available at all hours on the phone.

Burners

4 x naturally-inspiring, 3" diameter burners, firing horizontally in the base of the kiln, parallel with each of the four sides. Individually adjustable, with elbow entry and flame retention nozzles. This configuration results in a spiral gas movement within the kiln.

Two smaller 2" diameter burners were later added about half-way up on opposite sides in an attempt to overcome the 2-cone temperature difference between the base and top. These resulted in excessive reduction, choked the gas flow and created uneven pressure in the kiln. They were removed after several firings.

Unless you use Rolls Royce-type burners with highly polished and exactly machined mixing chambers and no bends, naturally-inspiring burners will always have an inherent fairly low efficiency. They require a large amount of primary air plus secondary air to achieve complete fuel combustion. Sometimes these burners are run with the primary air wide open throughout the firing, except when extra-heavy reduction is needed.

Jet Sizes

We gradually drilled out the existing jet on one burner a few thousandths of an inch at a time, until the flame lost its

body, that is; the blue core of the oxidising part of the flame became soft and gradually disappeared (even with the primary air wide open) the overall flame became floppy, yellow and slow. We then brazed up the jet hole, and drilled it several sizes below the last diameter. This is easy if you have access to a gas welder, otherwise spare jets will suffice.

Inlet Flues

Our original burners were actually set 2" into the square secondary air inlet flues, with result that their flame-retention nozzles were quietly roasted during many firings. The square flues were a stupid mistake aerodynamically. That is why square aeroplanes are no longer viable. The two resulting parallel streams of air and gas were almost impossible to mix efficiently, and caused swathes of highly varying atmosphere with attendant oxidising, blistering and bloating.

The burners have since been moved out of the flues, with a 1" gap between the burner tip and the flue entry. Four 3½" diameter round, tapering entry flues were made from 1540°C. castable material, resulting in greatly improved mixing and flame efficiency. Too much gap between the tip and flue will sometimes result in very sensitive damper control, which is a pain. Our secondary air gap remains constant throughout the firing. All excess-air flow adjustments are made with the damper, which is the most important control system in a naturally-inspiring kiln.

Chimney Flue

This was one of our main trouble-spots. An 11'4" solid refractory brick tunnel connected the exit flue to the external chimney. The unproductive heating of its large thermal mass probably consumed enough energy for a complete biscuit firing, while contributing nothing in terms of efficiency in a glaze firing. In a flue of this length the back pressure or resistance to draw will be considerable, needing extra chimney height to counteract it.

The modified flue is 12" long and is lined with ¾" 1250°C fibre up to the damper in the chimney base. This creates a sort of secondary firebox with low thermal mass to create a fast "hot spot" to assist draft.

Chimney

Again, another lesson in thermal mass. The original chimney was about 21' high and was made from 10" diameter stainless steel. It had insufficient thermal mass, which is essential to establish draft and to continue that draft after the firing is complete. The kiln

used to take 2 days to cool: now we can unload the following day, which is nice.

Also in cool weather the top of the stainless chimney would cool the rising flue gas, which would then act as a plug to further retard the draft. The present chimney is about 8' high, by 108 sq in., and is made from dense firebrick, venting into a separate exhaust hood. It has since been lowered to 6' high and still works well.

Damper

This used to be in the flue tunnel immediately after the exit flue, and has now been moved into the vertical base of the present chimney. This equalises the internal pressure of the kiln up to the damper and avoids "robbing" the chimney's pull via every chink and crack in the old flue tunnel and damper system. It also avoids the constant cooling effect this has on the flue.

We have also eliminated the bleed-brick in the chimney base. It was too coarse and allowed cool air into the chimney, cutting down its efficiency. For the first few hours of a firing we insert a 2" burner into the chimney base to pre-heat it and give a good draw.

Atmosphere

We now always use a digital oxygen probe to adjust the atmosphere, as well as visual checks. The sensing tip of the probe is highly sensitive to variations in atmosphere and almost instantly shows the result of gas, air or damper adjustments. It enables us to accurately hold the kiln at neutral, or peak efficiency, until we are ready to begin reduction, in which case we can set exactly the type of reduction required. The probe also makes it possible to adjust each burner for optimum combustion, and to sample the already mixed gas in the exit flue. One word of warning: the probe, at the height of the firing, is hot enough to melt the low temperature back-up fibre used in many kilns, should it contact it while being withdrawn. The resulting glaze easily corrodes through the expensive platinum wire outside the probe sheath. Always line the sampling hole with ceramic tubing.

At the Caulfield Institute of Technology it is mandatory for students to use this type of probe to obtain accurate and repeatable results and to save fuel.

Gas Consumption and firing time

At present we use about 6% of an 1800 litre tank—roughly half of our previous consumption. Firings aver-

age 14 hours, with very satisfactory results, although there are still some minor problems to iron out.

Conclusion

After all this the one remaining major problem is the 1½ to 2 cone temperature difference between top and base; the base invariably being over-fired if the top is to be satisfactory. Over many firings, we have tried many possibilities including a variety of soak-cycles, gas pressures and 45° ramps placed near each burner. At the time of writing, we are rebuilding the kiln-base so that the burners fire upwards—two burners on opposite sides. This may eliminate the intensely hot horizontal fire-box effect which drops the base cones 2—3 hours ahead of the top cones just beginning to move.

Looking back over the experience with this kiln, it appears that I've learned quite a lot, although sometimes I'm not quite sure what. One thing is slowly sinking in: when someone says they know what they're talking about, or that their way is the right way, they are talking from their experience. Your experience with your kiln may be quite different.

It takes time to get to know a kiln. Trust your own intuition, which may tell you something that is quite different from what the experts say. Try not to make too many changes at once during a firing, and give the kiln a chance to catch up after each set of changes; maybe 10—15 minutes.

Postscript

As a consequence of burner modifications, that is with two sets of burners on opposite sides now firing upwards, we obtained some exciting results as follows.

Firing time: 0°—1300°C over nine and a half hours. I would have given a one hour soak, but the gas ran out.

Temperature Distribution: A hotter top, the difference between the top and bottom cones was about 15 minutes. The sides without burners were cooler as expected, and the very base of the stack was underfired which would have been corrected by extra soak time. Overall the results were pleasing with only occasional flame flashing on a few pots near the vertical flame columns.

Gas consumption: Approximately 5% of the 1800 litre tank.

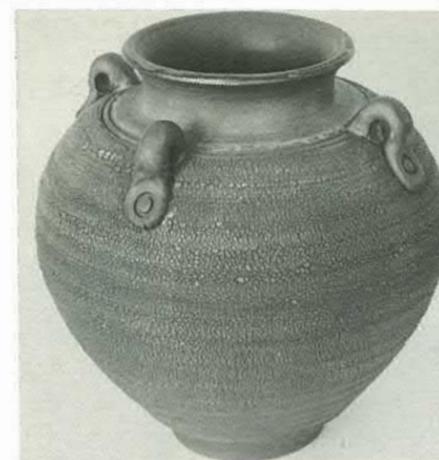
This first trial glaze firing was a joy to manage. Temperature rise was effortless, as the smoothly rising kiln log demonstrates. I like the fact that we can now have a choice of length and time of firing.

Winecraft Gallery

At Winecraft, Marewa Village, Napier, a visitor can select quality pottery in a convivial atmosphere. Ten years ago Joyce and Ian Vigor-Brown combined their interests of wine and pottery to establish Winecraft where the policy at first was to specialise in local work from Hawkes Bay. Latterly they have widened their horizons by inviting potters from elsewhere for an annual exhibition, and this year they took a big step forward by mounting a major exhibition from 11 Auckland potters showing some of the best work over the entire range of our potting styles. Represented were: Len Castle, Peter Stichbury, Margaret Milne, Lex Dawson, Dianne White, Rosemarie Brittain, Roger Brittain, Chester Nealie, Ted Dutch, John Parker and Rick Rudd.

Winecraft Gallery has now sole rights to sell the work of Edgar Mansfield, internationally recognised sculptor from Hawkes Bay.

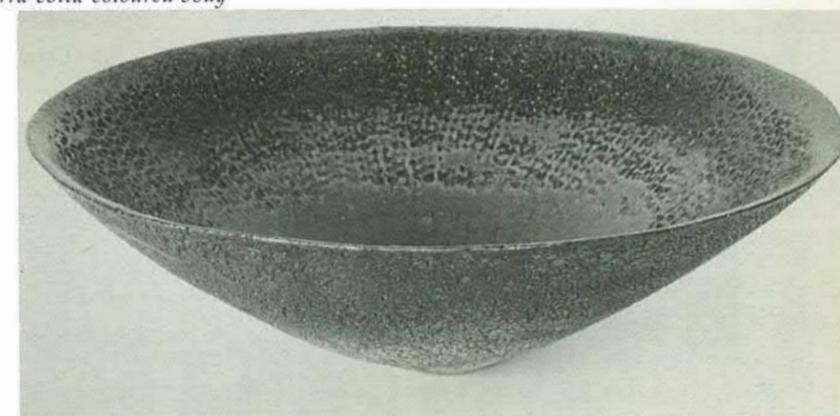
An article on your craft gallery/shop will be considered if you supply first class photographs of your best work and some information on your gallery's particular character.



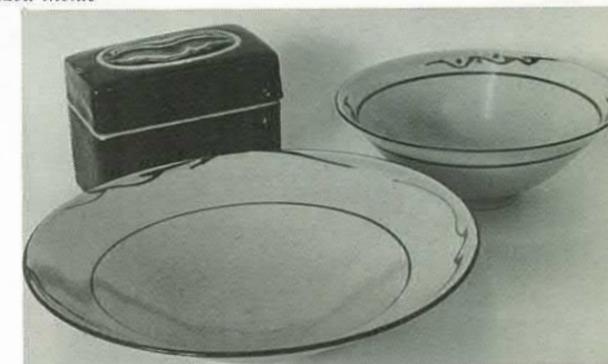
Roger Brittain, turquoise over terra cotta coloured body



Rosemarie Brittain, birds celadon and lustres



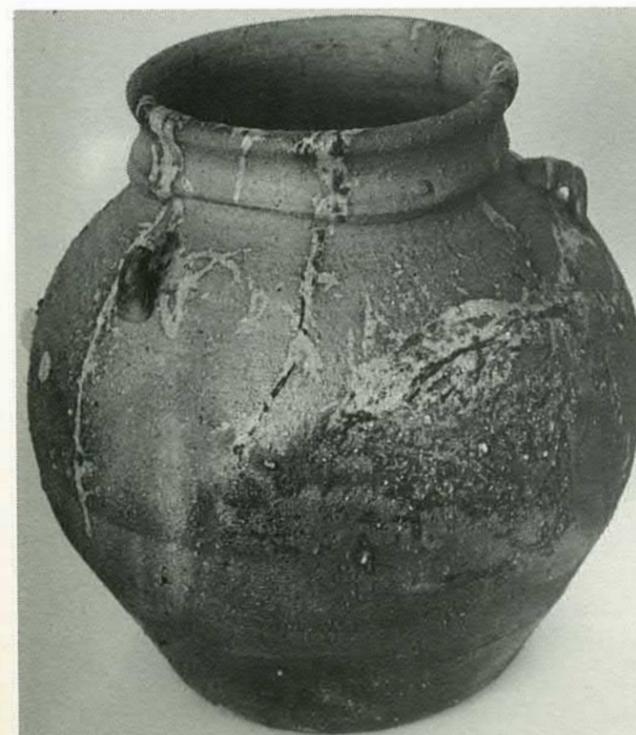
Len Castle, bowl, glazed inside



Margaret Milne, black and white with red brush work



John Parker, bronze lustres



Lex Dawson, wood fired pot

THE NEW ZEALAND ACADEMY OF FINE ARTS

Wellington, Winter 1982



Flora Christeller



Ainslie Dow



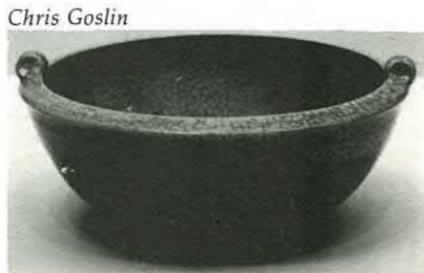
John Crawford



Peter Masters



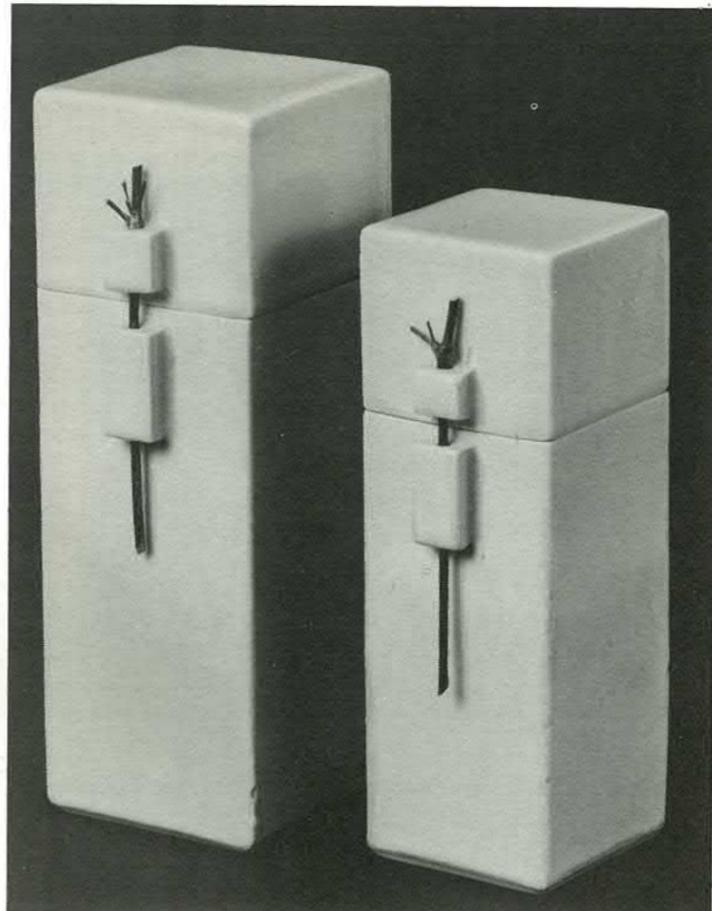
Debbie Pointon



Chris Goslin



Judith White

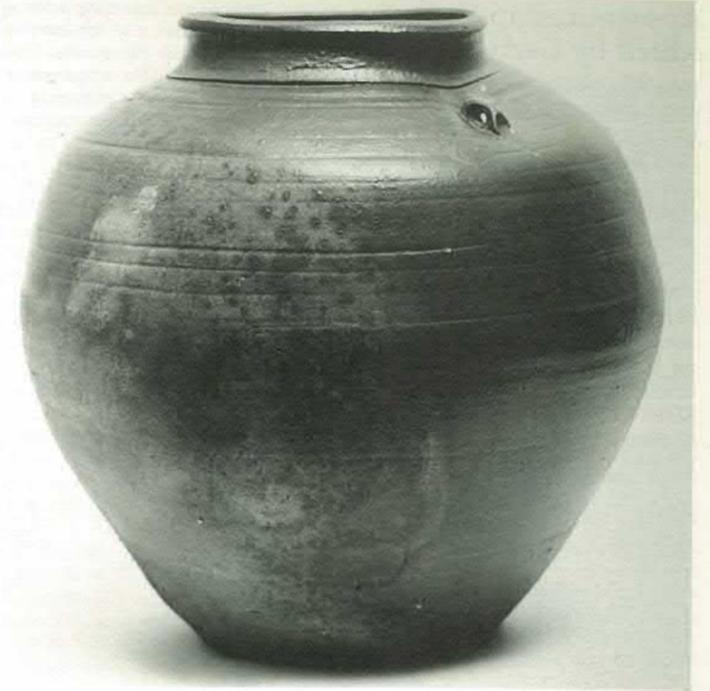


Right: some of Jean Hastedt's work shown at the Academy which won for her the Bank of New Zealand Award. Off white porcelain, the taller is 190 mm. Photograph: Richard Silcock

Fletcher Brownbuilt Pottery Award 1982

Chester Nealie's wood fired jar of classical form, won this year's premier \$3,000 award. Judge Gwyn Pigot from Australia speaking about her choice remarked "there were many beautiful pots, but this one I couldn't stay away from. It has a life to it that is very attractive".

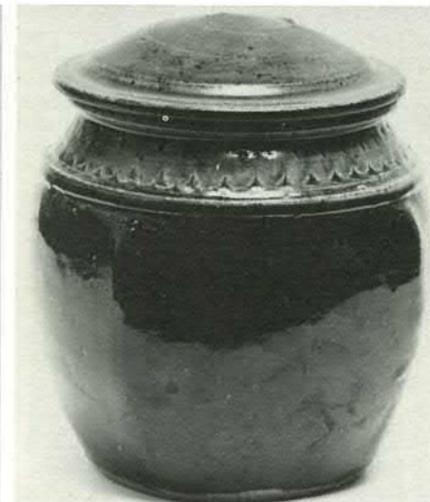
Ninety-nine pots were selected from 300 entries from home and abroad. Merit winners were Cecelia Parkinson, Auckland, high fired saggar porcelain bowl, Richard Parker, Kaeo, jar, Nick Stather, Auckland "Entrance way", Patricia Shia Crabb, USA, "pictograph cylinder", Richard Batterham, England, covered jar, stoneware, with ash and iron glazes, Ray Rogers, Auckland, pit fired 2 floor pot, Rick Rudd, Whangaparoa, raku 474, Stephen Benwell, Australia, stoneware, hand-built with underglaze painting, Neil Tetkowski USA, "natural variation".



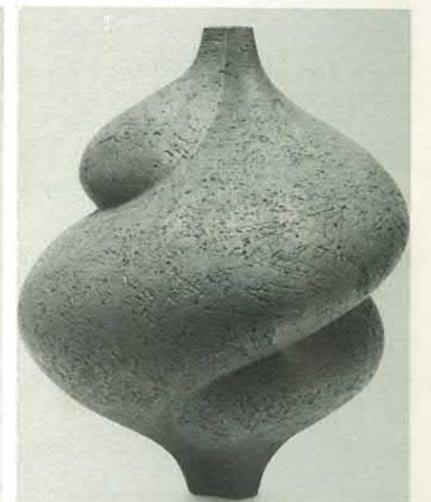
Chester Nealie



Cecelia Parkinson



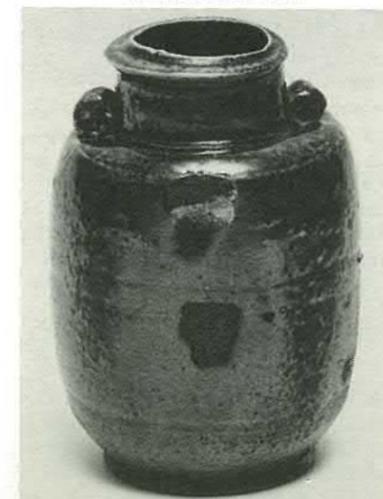
Richard Batterham



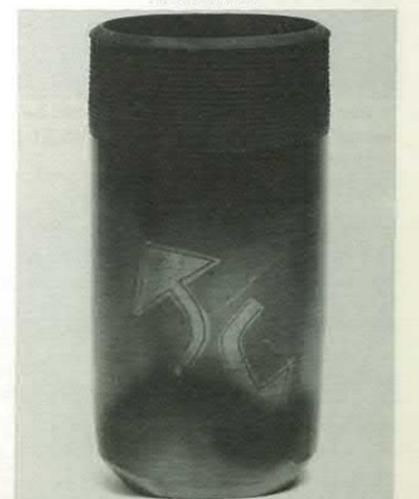
Rick Rudd



Stephen Benwell



Richard Parker



Patricia Shia Crabb

Apprenticeship in Craft edited by Gerry Williams

This handbook is valuable reading to both students and professionals. Based on papers presented to the first conference on apprenticeship by experienced craftspeople, it offers personal experience from those who have been apprenticed and those who have offered apprenticeships. Focussing on four stages of apprenticeship, finding, keeping, nurturing and releasing, all areas to be clarified when embarking on this special relationship are identified.

\$US9.95 to Daniel Clark Books, Box 65 Goffstown, New Hampshire 03045, USA

About Apprenticeships

Apprenticeship provides an opportunity for the young craftsman to come in contact with a working master who has already come to grips with aesthetic issues, and can share some of his experience with the apprentice. In the best relationships both master and apprentice can grow and change. The apprenticeship, furthermore must deal with the psychological relations between master and apprentice. In a successful apprenticeship both master and apprentice need a mature sense of what they are doing and why they are doing it and in the last analysis they both must have openness, and acceptance, a high level of tolerance, a strong civility, and a deep sense of awareness of themselves and other people.

Warren Mackenzie, potter, Minnesota

Apprenticeship seekers should perceive themselves as worthy human beings in search of

growth and deserving a fair chance to find it. This is your time for learning, to absorb and carry away the positive influences you urgently need. The things you care about must be clearly identified and applied as guides, as you look at possible apprentice positions. Few people have a chance to correct an unwise choice by selecting a better choice later on. Part of the apprenticeship concept necessarily involves compromise. The trick is to identify your priorities well enough that when you assess the compromises in a given instance you can see your chances of survival clearly then act accordingly.

Try not to be swayed by the reputation of the master (or lack of it). Judge for yourself by getting close to the person in his workshop. It takes a great deal of time to arrive at some point of balance between personal and family life and studio demands. I feel these matters are rarely resolved on a permanent basis. My best advice is to give such matters their just consideration and avoid relationships where disharmony seems likely. Major clues about the master come from thoughtful contact with the work he or she does. Try to discern and measure the values expressed. That spark of feeling which registers with you is part of the value structure you will carry away with you when your time is done. Impressive equipment and facilities do nothing to make the work there more meaningful.

Factual issues to be settled such as workshop hours, time with the master, time for your own work, discussion times, space allotted, use of equipment, duties (should be spelled out clearly), and money—would you trade studio work for time and space to work on your own—would you be paid on a piecework basis (if at all), or would you pay the master.

We (craftsmen) should reflect upon our obligation to put vitality back into the structure that has nurtured us over the years. We owe

each new generation of craftsmen our skills, our philosophies, and an exposure to our lives as a whole; if fallible human beings. We cannot afford to halt the needed transfer of knowledge and feelings by denying contact because of pride or inconvenience. If we are not willing to give of ourselves, we have no right to criticise or be indignant at conditions in the crafts which we wish were otherwise.

If I were pressed to say who might well begin without an apprenticeship, I could say self starters. Motivation, enthusiasm and courage combined with a reasonable measure of practical knowhow are good starting tools. As with any approach to craft there will be an inevitable price to pay. If the apprentice pays with his own time for the gains of that particular kind of experience, the self-starter pays in equally specific ways. **Constructive failure** is a term I would apply to much of my own early learning. In fact I can hardly confine the notion to early experiences, since to this day I occasionally bang my head against my inadequacies. I seem destined to try many new tasks or design problems the wrong way. Then, finally seeing the way not to do it, I find useful solutions. Time may be lost but never wasted in such a manner. You must keep on trying until the fear of failure is forgotten. Now I try anything and I consider temporary frustration a small price to pay for the sense of elation I receive from tackling the problems directly. I know I won't let myself fail for too long. I suppose there is another form of apprenticeship—a self apprenticeship—that can last a lifetime.

John Glick, potter, Michigan

New Zealand potters' experience with apprenticeships has been variable and we understand there are none at present. Perhaps some bureaucratic problems could be avoided by the formulation of a more suitable learners contract.

The New Potter's Companion

by Tony Birks

For beginning potters this expanded version of the 1974 edition provides lucid instructions for forming and decorating techniques. Apart from throwing domestic ware, the chapters on moulded pottery, slip casting, pinching and slabs provide alternative approaches for those who do not wish to use the wheel. This book would be a useful text in club libraries. M M H

Australian Potters Conference 15-21 May 1983

The Potters Guild of South Australia is organising the Third Australian National Potters Conference. The central venue is the University of Adelaide where there will be the usual lectures and demonstrations and exhibitions. So why not plan an Australian holiday next year in Adelaide, close to famous wineries and galleries and visit resident potters in their workshops. Information to PO Box 234 Stepney 5069 South Australia.

Residential summer workshops 1982

Taupo Tauhara Centre, 7 day workshop, wide ranging making and firing methods. Tutors Brian Gartside, Madeleine Findlay. Write to Brian at Kerns Road, Pukekohe RD2 for pamphlet.

Manawatu Mirek Smisek runs courses throughout the year. Write Box 6 Te Horo.

Nelson Royce McGlashen, Cob Cottage Pottery 126 Ellis St Brightwater. Jan 24-29 and Feb 21-26. Inquiries SAE to above address.

Southland Borland Lodge, Lake Monowai. Jan 15-23. Inquiries Audrey Simmons Heddon Bush 1RD Winton

Back Issues

Vol 21/1 Reduction in electric kilns
Vol 22/1 All about raku
Vol 22/2 Make your own fibre kiln
Vol 23/2 Bourry fire box
Vol 24/1 Production raku kiln

Workshop opportunity experienced potter

A trained craftsman is invited to share workshop facilities at Waimea Pottery. Opportunity to sell through our showroom and established outlet. Further details on application to Jack and Paul Laird, Richmond, PO Box 3065, Nelson.

Survey of Craftspeople

The Crafts Council of New Zealand and the Vocational Training Council are collaborating on a postal survey of craftspeople and semi-craftspeople (defined as someone who earns \$2,000 or more a year from sales.) The survey is to establish the size of the craft movement in New Zealand so a strong case can be put up for training and support of various kinds. If you fit into this category and have not received a questionnaire, (information kept confidential), write to Crafts Survey P.O. Box 11-3611 Wellington.

Wellington Potters 1982

At Antipodes Gallery this year Chester Nealie selected for Wellington Potters, 157 exhibits making an exhibition of varied and highly developed work. Displayed to best advantage by Pauline and Bill Stephen it was a pottery show of National standing.

Of the more recent members Gloria Young's teapots (5) and casserole stood out in their simple integrity and glowing warmth. The stoneware forms, rounded but crisp, were complemented by a vital glaze with rich red breaking through green. Curly, strappy handles on the casserole and rosebud knobs on the teapots gave added individual expression. Wendy Masters' porcelain boxes and plates beautifully crafted, using the mocha technique, new on our scene made an excellent contrast in surface decoration to Patti Mead's brilliant plates and boxes of extravagantly rich lustres over black. Jean Hastedt presented some elegantly tall porcelain boxes: outstanding was her tall teapot with silver banded handle. White glazed with palest copper mauve and green blush at the base, it was an exquisite piece.

Murray Clayton's collection of six shino bowls, nine stacking bowls, with strong glazed rim and interior, and two rectangular slab pots with well placed glaze encrustation, made an impressive showing. Warmth and skill were reflected in the burnt orange skin shino glazed ware of Mary Lawrey Smith. Notable among other domestic pieces were Jenny Shearer's porcelain teapot and six cups where the rounded, dimpled forms were more gently expressive than her more hard edged porcelain forms. David Shearer's moulded lasagne dish with flourishing slip trailed design in Tenmoku was a most palatable dish.

Of Anneke Borren's low fired stoneware, expertly made and decisively decorated over opaque glaze in the European style, the candleholder invited a celebration. A multipiece impeccably matching tea set and tray demonstrated this potter's competence in her chosen style. It is to be hoped that Anneke Borren's skill and originality are not locked to this forever. Debbie Pointon's highly individual collection of fumed porcelain was the usual high standard we have come to expect from this ceramic artist. Salt glaze found a pleasing expression in Flora Christeller's stoneware bowl, lidded jar and tall pot.

One of the features of this exhibition were the successful innovative features showing pleasing expression on many of the pots—Maureen Hunter's metal-

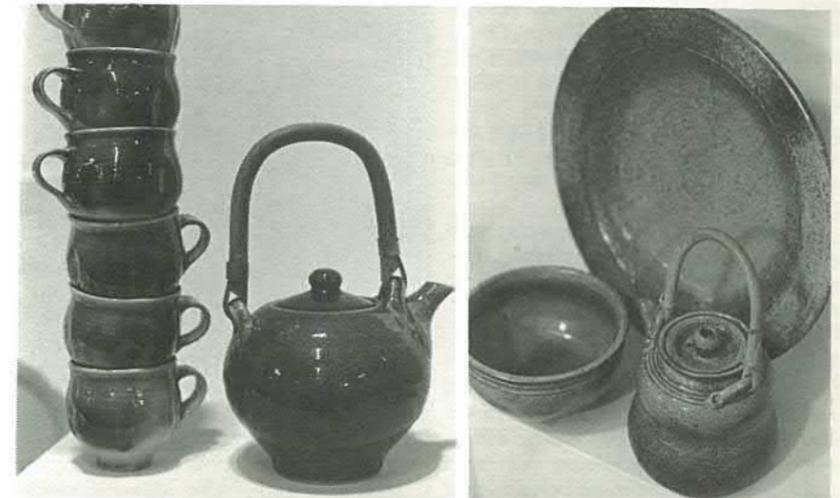
lic banded sheen on her semi glazed raku jar—Ann Powell's ribbon pots.

Highly competent domestic ware was presented by Jackie Levy, Julie Palmer and Beryl Buchanan. Unrelieved correctness, a considerable achievement in itself, made one long however, for a relaxed twizzle, hump or bump and for a lively shiny glaze to add the essential vitality.

Sixteen very fine pots from selector/guest potter Chester Nealie were all wood fired to 1280°C in an Anagama

type tunnel kiln. The pots, varying from large jars to bottles to small vases were warmly textured, characteristic of the traditional Japanese firing method. On "Manuka" so named after the bushed landscape at Kaipara Heads, the passage of the flame was firmly patterned on the pot. Of classical form, rugged and highly sensitive at the same time this for me is the ultimate in pots. I bought it.

Margaret Harris



Jenny Shearer

Mary Lawrey Smith



Maureen Hunter
Wendy Masters

Gloria Young
Murray Clayton

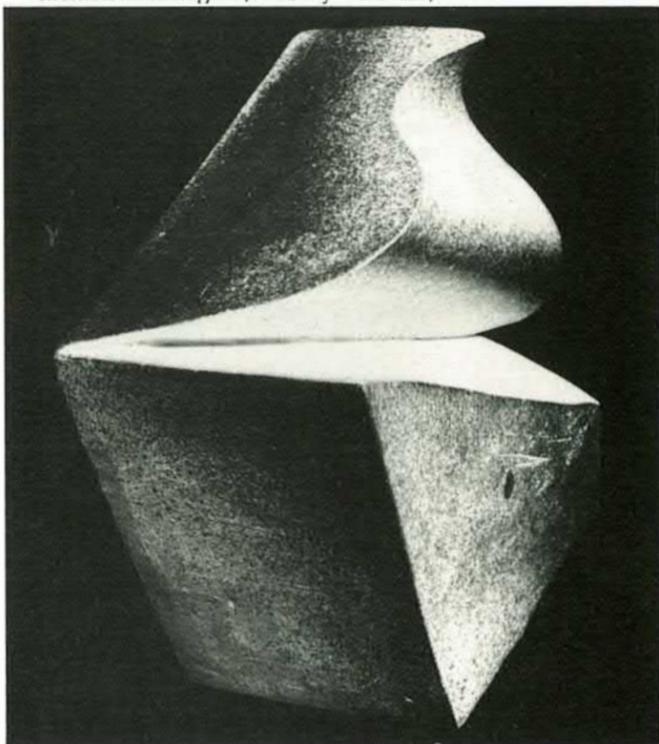


Sculpture in clay James Greig

"Transformations" a survey of James Greig's pots at the Wellington City Art Gallery explored a personal philosophy transformed into pots, and forms transformed over ten years development since 1970. Each pot on its own, showed strong handling of shape, in particular the recent large slab pots with their contrast of sharp angular and curving facets. The exhibition sequence began with a seed pot from 1970, the shape suggesting the beginning of a rhythmic unfolding into space. From that embryo the pots presented facets of the way natural forms unfold, contract and expand, thrust outward, turn inward, engaging external space and enclosing internal space. James Greig is attracted by the power that forms gain through the spatial connections between intersecting planes, solid and void mass and space.

Though the forms are sculptural statements, there remains strong references to traditional pottery forms and clay and glazes. In the emblem series for example, the swell and thrust of the neck, belly, mouth and base of the archtypal pot, are reduced to motifs. The exhibition provided a fitting summary of James Greig's concerns

prior to his taking up of a Japan Foundation Fellowship.
Seddon Bennington, Gallery Director.



The colour of these big sculptures needs to be described to appreciate their impact. The red brown oxide over warm sandstone yellow gave the impression of reflecting sunshine.

photographs:
Jenny Hames

10 Canterbury Potters at the Suter Art Gallery, Nelson

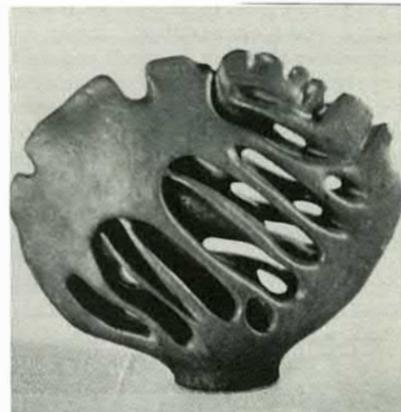
The overall impression was of disappointment that some of the most prominent Canterbury potters working in domestic stoneware did not represent a balanced collection of work worthy of a major exhibition. The exception in this category was Lawrence Ewing. His jars and bottles to perfectly scaled sizes, their waxy glaze gleaming, oiled rope handles beautifully made, produced the kind of domestic pottery rightly exhibition pieces.

Aina Apse showed a group of bowls and spindly bottles with heavily grogged clay body crisply turned or faceted, forming a display of dignified authority. Metallic looking sculptural pieces with reference to containers presented by Gita Berzins were a welcome alternative approach. By complete contrast was a collection of fine translucent porcelain pieces by David Brokenshire. Handbuilt and flowerlike the interest was in the shaping and colouring of the inside. Further forms and treatments from David Brokenshire's sensitive handling of his material would have added to his exhibit.

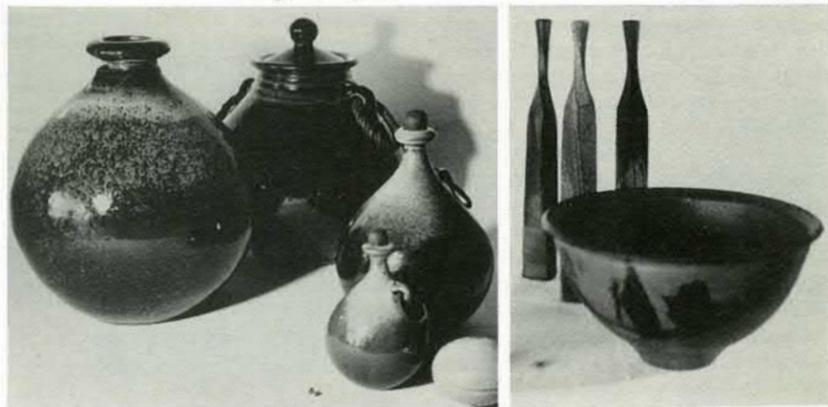
The initiative of galley director Austin Davies in securing an exhibi-

tion by ten leading potters could have been expected to bring refreshing influences to bear on Nelson pottery whose critics complain of a "sameness" in forms and glazes. It was disappointing that some of the contributors to this exhibition seemed to be suffering from an attack of Cantabrian *deja vu* and were unable to meet the challenge. Perhaps next year Austin Davies will look to Wellington—or elsewhere, for some refreshing breezes of originality.

Margaret Harris



Left: Lawrence Ewing
Above Gita Berzins. Below: Aina Apse



Book Review

Native clays and glazes for North American potters
Ralph Mason, Timber Press, Oregon, \$US17.95

At first glance this looks like a typical American approach. (This does not abate as one advances through drilling patterns, nail maps, flow sheets, metallurgical balances, beneficiation, mining clays, taming clays, drilling tricks and many others.) More like a useful start for someone entering the raw materials side of large a ceramic plant. It almost appears that the "colonial" drive, after having divested itself of the straight jacket of English tradition, has run out, so that we get a Boy Scout approach, overlaid with extravagant use of energy. The trailer load of equipment needed to go prospecting requires that the sample be loaded in the car to give it traction enough to pull the trailer.

While there is some useful information on how to spot possible sources of clay, I feel that these are unlikely to apply to much of New Zealand. Most of the North American scene is low rainfall country where clays are not apparent as such.

A brief mention is made of the Hamada approach to clay, that is coming to terms with the clay nature left locally, but is quickly left, for the American preoccupation with white-ware, and the use of oxides as pure as possible. It comes out in several instances, not least in the chapter on

"The perils of prospecting" where on politely approaching a land owner, only the dog barks, beat a hasty retreat, for "its better to forgo an iron-free clay in favour of a lead-free body". But this approach makes for vitality and makes for easy reading.

The whole book is also about raw materials, and the average potter may wonder what its all for. Great pains are expended to test clays with numerous charts and graphs for selection and blending, but there are no criteria to aim for. It may be taken for granted that one is expected to know one's needs, but examples would be useful. How to combine the various and variable factors, such as plasticity or the lack of it, refractory or otherwise, dry strength, ability to stand working and many others are hardly mentioned. A whole chapter that is devoted to the making of cones from clay to be tested, and comparing the falling point with standard cones (PCE or Pyrometric Cone Equivalent) is interesting, but really for the enthusiastic born tester. I admit that the usual potter is rather rough and ready with a test bar and perhaps a small thrown piece fired under his usual conditions. It usually works.

The selection of natural glaze materials follows much the same pattern. While it recognises that some potters have an overriding and compelling interest in using only material found in the field, it suggests however that it is rarely economic. No wonder if

one has to carry out even a fraction of the testing recommended. This section assumes a fair knowledge of glaze theory, and there is an assumption that a "slick" glaze will be the end product. The common New Zealand practice of grinding up almost anything to see what happens, with its attendant excitement, is entirely lacking. Haematite seems to be the only permissible use of iron, though rutile and ilmenite are mentioned in the tables.

Beneficiation is a term constantly used, and contrary to what one might expect it is **not** adding material to benefit a glaze, but a mining term for eliminating unwanted fractions, particularly iron. Magnetic separation is used frequently, often laboriously by hand. Beneficiation is more akin to selection and washing gemstone material.

While I cannot entirely subscribe to the dictum of some New Zealand potters that a glaze should be "body clay with a handful of ashes thrown in", this approach has its appeal of simplicity and directness, that is entirely lacking in this book. For example, a table or no less than 18 operations is needed for some beneficiations, the number being further qualified by a schematic diagram called a metallurgical balance. For the unsophisticated, "A metallurgical balance is most helpful in spotting bottlenecks on your flowsheet!"

Jack Luckens

"Potters whether experimental or traditional, are subjected to certain internal questions that go beyond the questions of training or education. Questions that go something like this: Who am I? I think we should all be able to answer "meticulous or free", "precise and cool" or "messy but warm." Then next, but in no order of priority, what are you trying to say or do with your pottery? Is it something about form, or tactile quality, something political or social? Then what knowledge and skills will you have to have in order to serve this demand? This will be all the scientific/technical bits about clays and materials and processes that go to actually getting something made. Then these three questions will be wrapped around one more (or vice versa)—money! How are you going to live while you are working out these problems? In which order you take these will be of vital significance to your work because, for example, if you chose to answer the last one first—"I am going to live by my pots"—when the finding out of who you are, and what you are trying to say and moreover the methods you use will be altered by that decision. Because what you make will have to be bought by people day in month out. Whether a potter went to an art college and got a diploma or learned from a repetition mug maker, these four questions will still have to be answered."

Mick Casson
Ceramics Monthly Feb 1982

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New Zealand Craftworks

From an outdoor pottery feature in March '82 photos show, Right — Bronwynne Cornish "Goddess". Below — Wood fired, salt glazed planters from Glen Beattie.

More recent features have included: Pottery from Nelson, Peter and Julie Gibbs, Royce McGlashen, Christine Bell-Pearson, from Auckland, Doris Dutch, Wendy Ronald.



Glass from Libby Gray, Julie Podjursky, Ann Robinson.

Later in 1982 we've special work coming from Warren Tippet, Bronwynne Cornish, Iain Crichton . . . and others . . .

Looking ahead to early 1983. Special features from Hawkes Bay potters. January — Chloe King, Jan Bell. February — Dennis and Fairlie Rowe.

To find us, look for the **NEW ZEALAND CRAFTWORKS** signs, the N.Z. Ensign and our craft flag on State Highway One.

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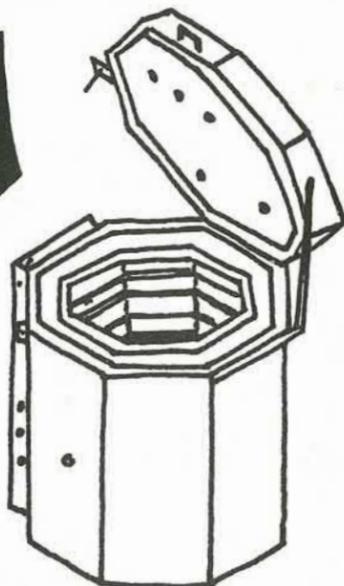
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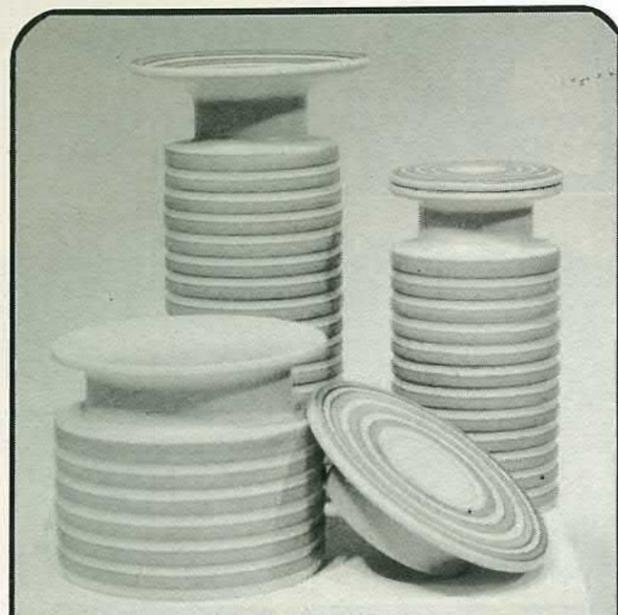
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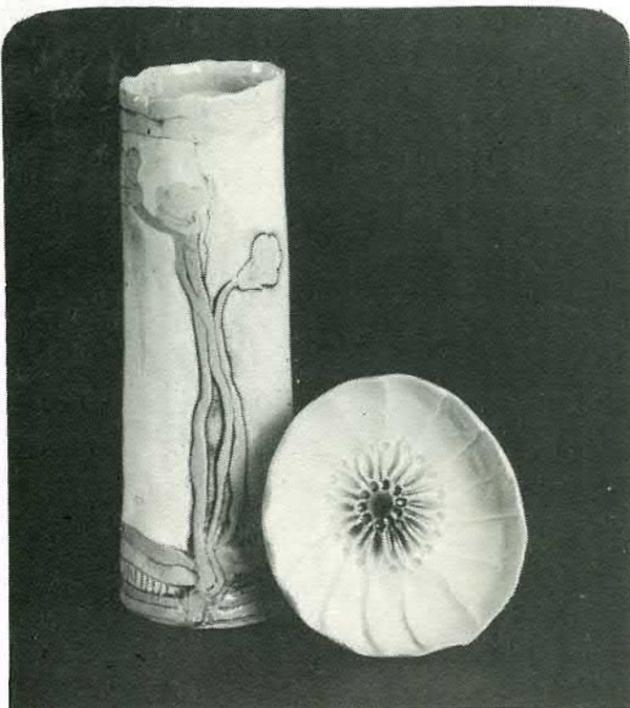
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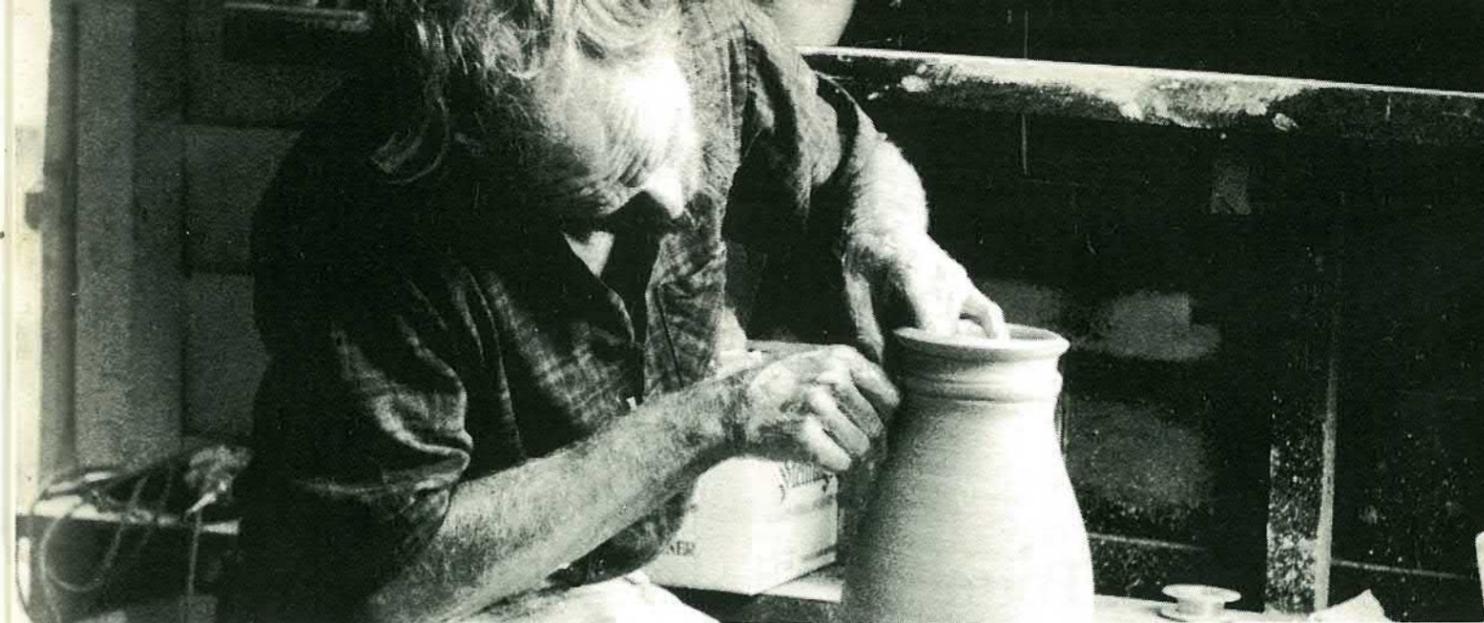


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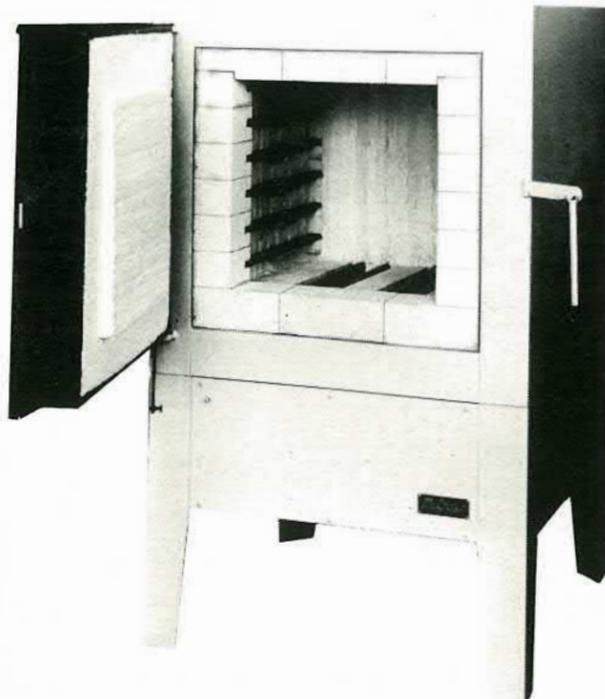
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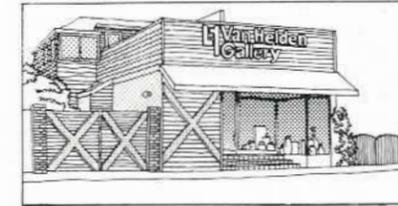
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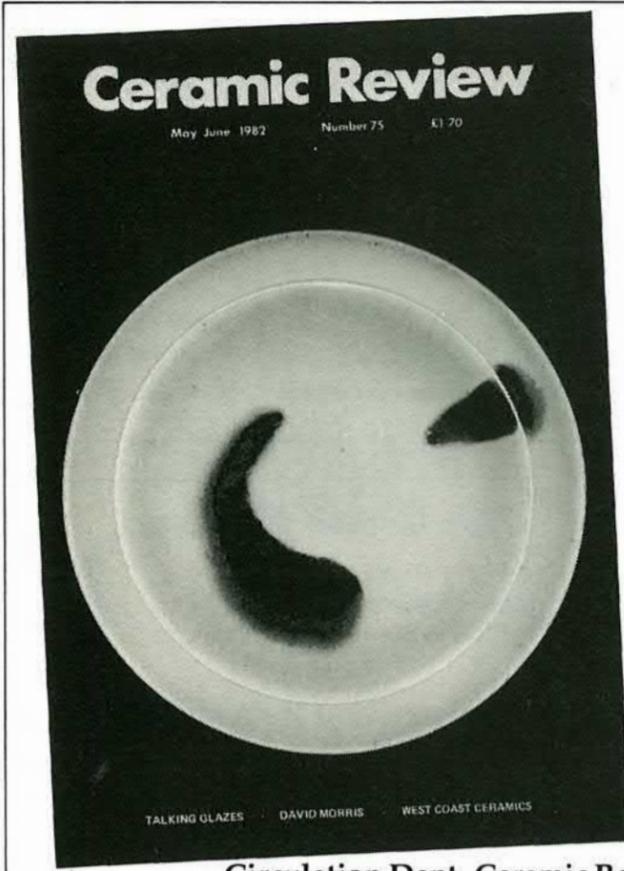


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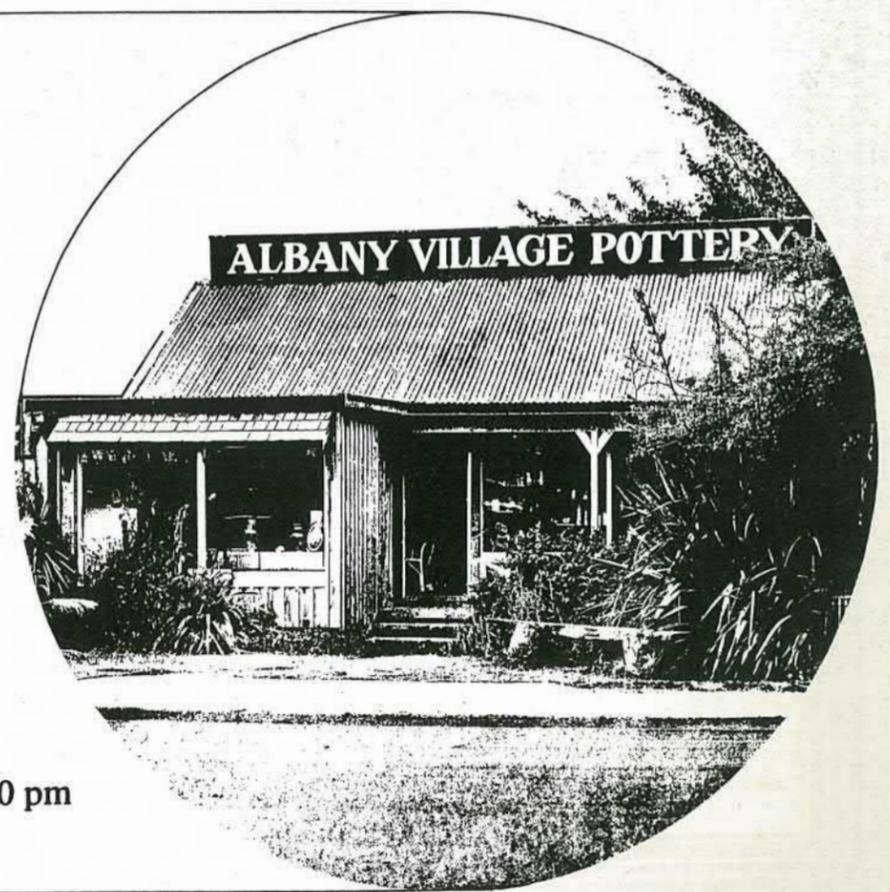
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