

CUT THE CACKLE - Lets call a Spade, a Spade

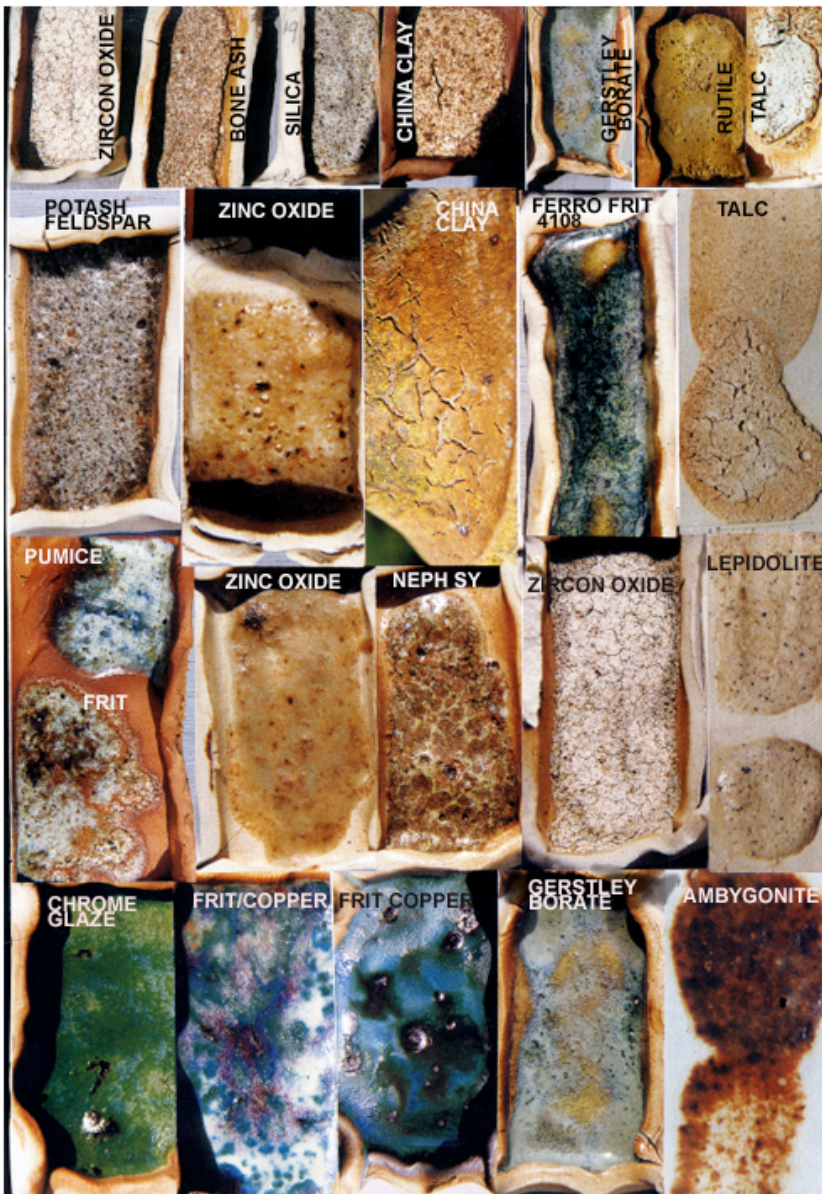
Winter, wood fires and wood ash



To observe full details in this pdf file it might be necessary to enlarge the pages. Your reader should offer you a way of doing this. It will lose no definition up to 200% and indeed enhance the viewing of the images

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WOODASH mixed 50/50 with..



In all instances the wood ash is mixed 50:50 by volume with the following materials. All are fired to approximately 1260C.

Zircon Oxide - a very refractory material; produces a dry surface.

Bone Ash - another product of burning an organic material.

Silica - refractory and normally glass-forming; produces a hard textured fused surface.

China Clay - difficult to melt; a tendency to shrink produces a crawling surface. Thicker application gives more crawling.

Feldspar and **Nepheline Syenite** - both produce more fused yet mottled surfaces.

Gerstley Borate and the **Ferro Frits** - as would be expected, melt really well and result in fluid surfaces. Very interesting

greens from Gerstley Borate. Puzzling!

Pumice Frit mixture - very fine pumice sand from Horotiu (Waikato) was mixed 50:50 with Borax Frit and used as a basic material. Again there is an interesting green colour.

Lepidolite - melts quite pleasantly and would benefit from the addition of oxides or stains.

Amblygonite - an amazing material if you can acquire it. Someone in Brisbane told me of a rumour of mining Amblygonite in Australia. I hope it becomes available. By itself or with other materials it always melts well to make rich glazes.

A LARGER IMAGE IS REPEATED ON THE LAST PAGE

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This is an article on WOOD ASH.

I've been trying to remember the beginning to a joke or riddle that ends, "No, but Edward Woodward would!" - it would have made a good title.

Many dynamic motivators move around the world telling avid audiences that attitude and visualisation have a very definite effect upon performance and results. This applies to sport and business, acquiring wealth, retaining health and all kinds of personal achievements.

It reminds me of the time I worked with groups doing raku firings. It was almost certain that the person who was most anxious about their pieces would experience some, or total, disaster and disappointment in the process. It did seem that if a person could develop an attitude that assumed faultless glazing, colour and firing, then a good result was virtually guaranteed.

In terms of attitude then, it seems that negative things tend to happen when we say to ourselves, "This is not going to work." or "I wonder if this will be OK?"

Visualisation is the other important aspect of this topic. In nearly all my experience in art - and in clay in particular - strong and clear visions of a finished product before starting, do not necessarily help the process to run smoothly. Too often, frustration and disappointment accompany such visions. I suspect that there are different types of visualisation and to be non-specific might be a more helpful strategy.

By this I mean that instead of seeing a glaze in all its precise and detailed glory in the mind's eye, it's probably more productive to visualise the actual feeling of success and discovery. This might take the pressure off the glaze having to perform its full excellence immediately and give it more time to reveal its possibilities and potential.

What I am trying to say is, that there is a lot of benefit in having imprecise expectations when looking at glazes and surfaces.

I suspect that a lot of glazes are discarded through lack of close attention. Very often small adjustments can be made to water content, the method of application; a cooler, hotter, faster or slower firing; a change of clay body or even of the form on which it is used.

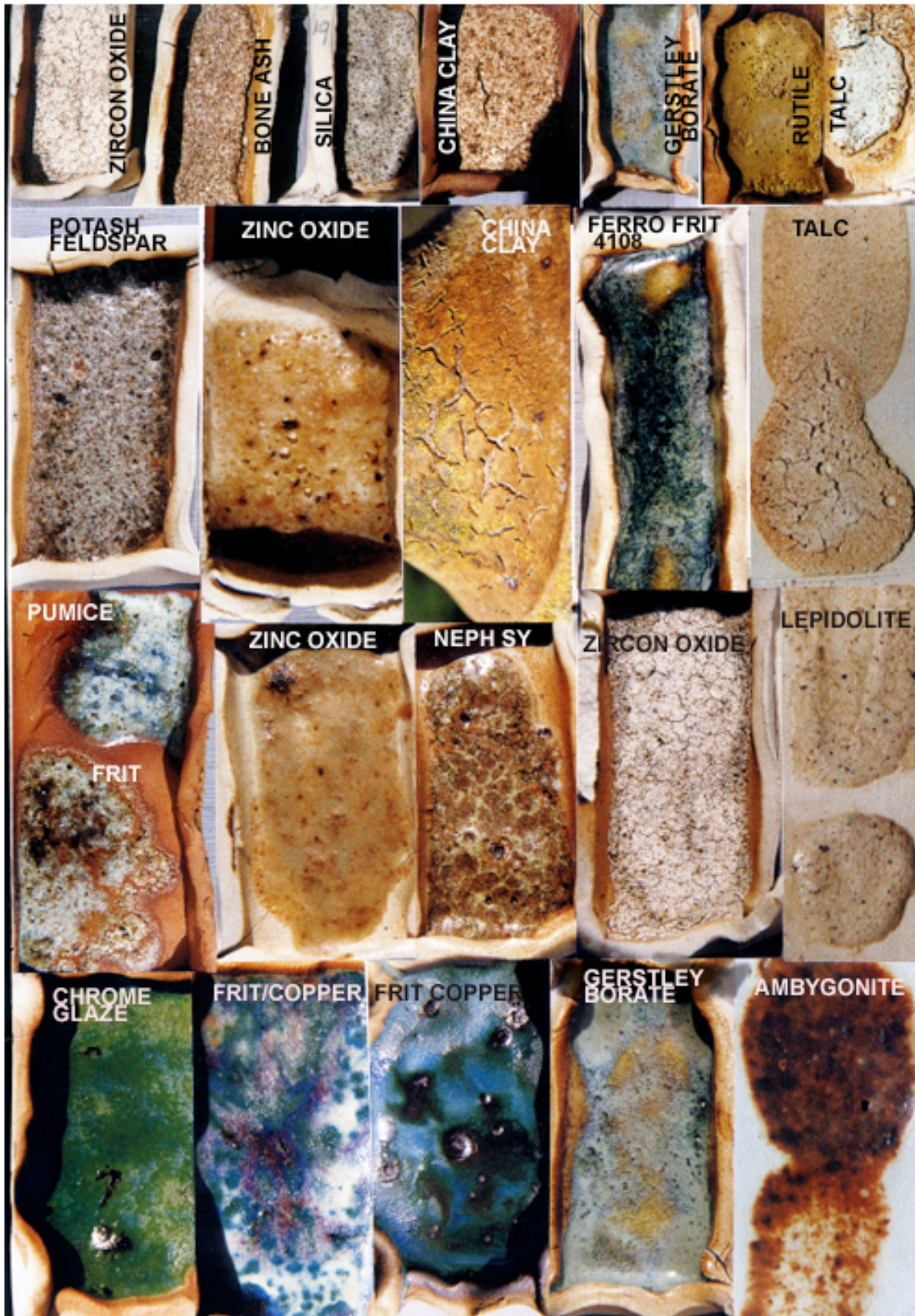
The accompanying photographs in many ways enhance the surfaces they represent. They are enlarged and focus is forced upon the viewer by the nature of the lighting and layout.

In a standard everyday situation with clay and kiln debris all around, the same fired surfaces can look very ordinary. Maybe this sometimes leads to the statement, "I tried your glaze suggestions, but they didn't work!"

Apart from the obvious variations of temperature, atmosphere, application methods, thickness, et al, it may be a question of seeing the result in a different context.

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OK! This is where the cackle is cut and the spadework begins.

Notes relating to the photographs.

Wood ash - most plants spend their lives lifting nutrients and minerals through their roots and using them to make tissue and fibre. In the normal course of events the tree or plant dies and rots, and the minerals and salts are returned to the earth. When we cut up and burn wood, the minerals and salts are all that remain after the fire has subsided. It takes a lot of wood to accumulate a reasonable amount of the greyish powder we call wood ash.

The wood ash I have used is mostly of unknown origin. For my purposes I shake the dry remnants of a wood fire through a garden sieve to remove bits of charcoal and old nails. A lot of books advise washing the powder, but this does remove some salts which might be useful in the melting process.

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The riddle I started with - I think the question was, "Do you know how thick four planks are?"

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The wonders of Wood Ash

Winter, wood fires and wood ash. Whereas there's nothing more wonderful than the feeling of well-being when the first wisp of smoke fills the autumn air with that delicious fragrance of gum wood, or in our case, cherry wood from the old orchard, what does one do with all the wood ash once the winter fires start burning day and night?

Whatever you do, don't waste it. Why? Well we all know that a wide range of trace elements is necessary for strong, healthy plant growth. There are some 16 in all, but the three main elements are nitrogen (N), phosphate (P) and potassium (potash, K). Nitrogen promotes plant growth. Phosphate helps to stimulate flower and seed production and a good root system. And potassium (potash) gives increased plant vigour which in turn helps plants survive adverse conditions and disease. And this is where wood fire ash comes in.

The term potash or pearl ash (potassium carbonate to be exact) is the white solid obtained from the ash of wood or other burned plant material. It is a vital constituent of fertile soil and gives increased plant vigour and helps promote disease resistance. It has been estimated that wood ash, depending on the material burned, contains up to five percent potassium, a small amount of phosphorus and a large amount of lime. This is why, if thrown in a heap, it will form a chalky mass.

Our forebears knew that wood fire ash returned to the soil would increase its fertility and it has been used for hundreds of years in the vegetable garden and the orchard, helping to replace valuable nutrients inevitably lost in the cropping process.

USES FOR WOOD ASH

It can be dug into the soil, scattered finely on top of the soil, used as a fine powder, made into a paste, sprinkled through the compost heap or mixed in with manures. Animal manure and wood ash makes an ideal substitute for a fertiliser. The leaching of the wood ash gives potash for good growth and the lime will help correct soil acidity. Earthworms, loving a sweet soil, will be encouraged and further enrich the earth.

Try sprinkling wood ash around the fruit trees in the orchard. This provides the potassium needed by all fruit trees, especially apples and pears and many of the berry fruits.

If the compost heap has gone sour add a bucketful of wood ash mixed through the compost to help sweeten the soil and encourage worms. If you own a worm farm, scatter a handful of woodash on the surface.

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If you still have a surplus, you could check out some of these ideas dating back to our early colonial days. Barren fruit trees, it was written, are constantly met with in almost every orchard and although the reasons for their lack of productivity are often a mystery, sometimes it may be the want of potash in the soil. A good plan is to apply ashes to the roots, opening up the ground and digging in two or three barrow loads of wood ashes and also to spread them liberally on the surface.

To take smut off orange trees, make a wash of wood ash and water thick enough to stick to the leaves and branches. This will dry on, but the first shower of rain will wash it off and take the smut with it. Throw wood ash onto pear and cherry trees when the slugs are at their worst and over cabbages to deter chewing pests. If the beetle or bug is present, sift some fine ash or soot over the plant.

An unusual idea was to mix wood ashes with salt when growing potatoes to keep the ground moist without rotting the tubers. Modern knowledge, however, indicates that potatoes, preferring slight acidity, do not respond well to wood ash and that salt and soil are not happy partners.

And finally, ash spread on top of live coals in the fireplace or wood stove helps to keep them alive overnight. In the morning simply stir the coals, add some dry kindling, blow gently, and in theory you should have a fire going in no time at all.
