

## Suggestions for use of ochre pigment.

The colours still mined at Clearwell caves are the same as those produced in the Forest of Dean for over 4,000 years. Throughout this time they have been produced mainly for use either by artists for paints and glazes, or for people making traditional paints to decorate their living spaces.

Pigments from native ores such as these from Clearwell Caves are invariably coarser than modern synthetic pigments (traditionally they were ground down by colourmen to as fine a powder as they possibly could). Due to the nature of the ochre deposits, our pigments are produced in small quantities using methods which earlier miners would recognise. At the surface they are treated in the traditional manner by sieving and then either being washed or milled. Their end purpose will dictate whether the pigment requires any finer grinding by the user.

The Clearwell colours:

**Yellow ochre** is an inorganic hydrated ferric oxide and ranges in colour from yellow to an umber brown.

**Red ochre** is an inorganic ferric oxide traditionally known as Terra Rossa d'Inghilterra, or English red.

**Purple ochre** is also an inorganic ferric oxide that is an equivalent to the natural ancient pigment Caput Mortuum.

When using natural pigments for a specific task ensure enough is prepared to complete the job, as colour matching as such between batches is almost impossible. The effect produced however will be unique and creating your own colours can be extremely rewarding. Below are just a few ideas for using our ochre:

### Art Work

All paints consist of a pigment for colour and a binder to give it cohesion and make it fluid. Ochre is completely light fast and combines well with any artists' material: water, spirit, oil, acrylic or varnish bases. Manufacturers such as Rowney and Windsor & Newton produce a range of oils, mediums, varnishes, diluents which combine well with the pigments. Here are some commonly used materials:

#### **Media for paints and varnishes:**

*Acrylics:* water based modern medium.

*Alkyds:* oil based modern version of traditional resin varnish.

*Egg*: yolk or white mixed with a little water.

*Glues*: gum arabic, size, casein, dextrin, bone and skin glues, any other commercially available glue.

*Ketones*: synthetic resins that can be dissolved in turpentine or white spirit.

*Natural Resins*: damar, mastic, amber and copal.

*Oils*: linseed, poppy, safflower, walnut, stand.

*Varnishes*: shellac, any proprietary commercial varnish.

*Water*: requires some form of fixative (e.g. water based glue, artists' fixative or even hairspray) to stop it from rubbing away when dry.

*Waxes*: beeswax (can be blended with oils, resins and diluents)

## **Decorating**

Ochre combines well with traditional materials used for paints such as lime and casein based products. It also mixes particularly well with modern acrylic and oil paints. For woodwork it combines well with different different types of varnish. External woodwork can be treated with materials such as linseed oil or thinned varnish coloured with ochre.

*Glazes*: mix ochre with wall paper paste to create a translucent glaze over a white or light colour base.

*Colour wash*: create a wash using thin coats of casein, lime or heavily diluted emulsion over a white or light colour base coat. The density of the wash layers can be varied by increasing/decreasing the amount of pigment added.

*Stencilling suggestion*: to create a complementary and pleasing stencil colour, make up a stronger mix of the same pigment colour as used on the underlying surface. Stencils created over a naturally pigmented base layer invariably feel right when done with either a stronger mix of the same pigment or any other natural pigment colour.

## **Pottery**

Ochre can be used extensively for slips and decoration of pottery, although greater variety of colour can be achieved at lower temperature such as wood firing, than higher ones where the tendency will be for ochre to blacken towards 1,000°C.

## **Paper Making**

Beautiful coloured papers can be produced by combining the pigments with paper pulp and size.