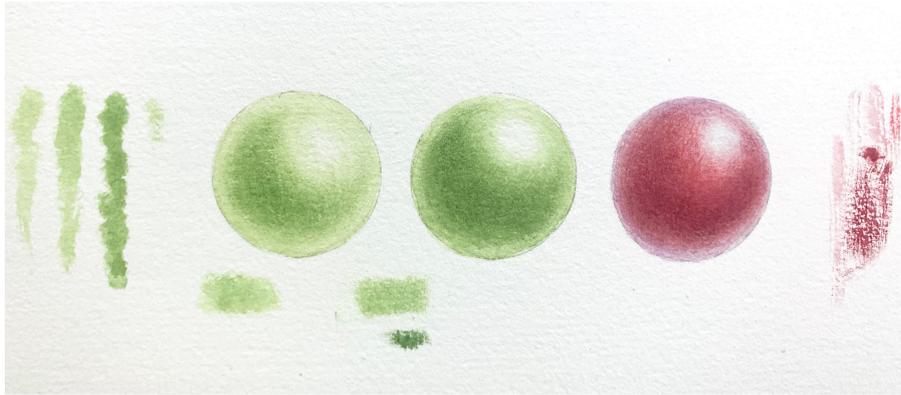


Botanical Illustration | Watercolour Part 1

Introducing the Watercolour Techniques



Putting Techniques into Practice

The Watercolour Techniques

Preparatory Watercolour Exercises

In this part of the module you will learn the basic watercolour techniques and explore where these techniques are best utilised. These watercolour techniques are applicable to botanical and natural history illustration and are well worth practicing.

1. Washes :
 - 'Tea' or 'flat' wash
 - Graded wash
 - Blended wash
 - Overlaid wash Wet in Wet

2. Dry Brush Techniques:
 - Modelling (to model the surface)
 - Dragging or Sweeping dry brush
 - Drawing dry brush
 - Stippling dry brush

These techniques will allow you to gain more control over the medium, and, as a result of practice you will find it easier to plan your work and achieve the desired look. For each technique the key consideration is the amount of water and ratio of paint to water used at each stage of the process; too much water causes the pigment to separate and too little causes unsightly brush marks. If you are not achieving the correct results then consider adjusting the ratio of paint and water.

Learning the watercolour techniques is important, thereafter the development of most botanical watercolour paintings can generally be broken down into a 5 step process as follows:

1. A line drawing is either drawn either directly on to your watercolour paper or transferred using tracing paper. Botanical artists often trace their images to the paper because it keeps outlines to an absolute minimum. Too many pencil lines can make your painting look dirty or can be difficult to remove once a wash is added on top. Use minimal pencil lines and where possible paint just inside the outline and remove pencil marks once completely dry
2. A light wash of the basic hue or hues is applied swiftly, any bright highlights are left clear. This initial wash may be blended using more than one colour, the wet-in-wet technique may also be used in the initial stage. The approach will depend on the subject.
3. Further washes may be added to build up colour. Up to 4 washes is usually sufficient for full saturation but often fewer are required. At this stage washes are more selective in application, which means that they can be applied only in the areas where more colour is needed, rather than all over. The best approach is to wet the area with clean water first and add the colour onto a wet or damp surface.
4. The surface area of the subject can be given more depth of colour and form by using the 'modelling' dry brush technique or sometimes 'sweeping' dry brush technique.
5. Finishing details are added using the dry brush techniques which are used for finer detail, such as for veins and hairs and texture in anthers and markings.

Watercolour Techniques.

Exercise 1. The Washes

1. Tea or Flat Wash.

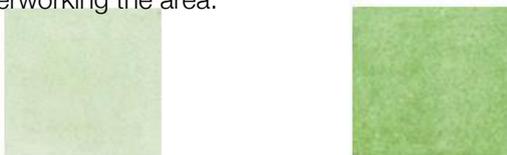
Using your chosen HP watercolour paper draw four squares, approximate size 2.5cm x 2.5cm and complete the wash exercises as follows.

Exercise: In the first square apply an even 'tea' or 'flat' wash. This simply means applying a smooth layer of watercolour to the area. You may find it useful to dampen the square with a brush with clean water first. Use a larger brush, no smaller than size 4 for all exercise. I mostly use a size 5 to 7 but also consider that the larger the area, the bigger the brush should be. Paint all 4 squares with the initial wash, working from the top to bottom of each square as shown in the video. Allow to dry completely between all washes. Then apply a second wash to the second, third and fourth squares (leaving the first square with just one wash). Apply a third wash to the third and fourth squares and finally add a fourth wash to the fourth square only. You will end up with four separate squares showing how the build-up of layers adds depth of colour with successive washes. If you are doing this exercise correctly you will see the difference between each square, from the first single tea wash up to the fourth square, which has four washes. There is little point in applying more than four washes of the same colour as maximum saturation is achieved in a relatively small number of washes. Try this exercise on dry paper and on a lightly dampened surface to see which you prefer

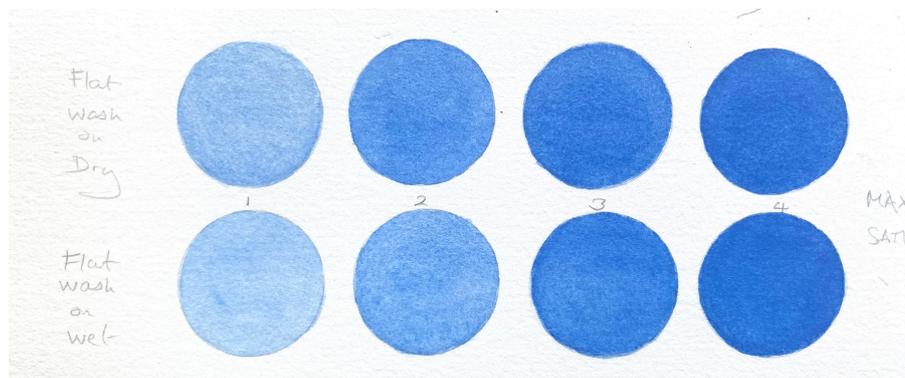
Tip: adding of a drop of Ox gall liquid to your water can increase the flow of the paint and allows more working time.

Optional activity: Experiment with different colours. Try to paint flat washes with the primaries, as colours can behave differently, some are easier than others.

Hint: Try not to get any paint 'pooling' at the edges of the square, if you find that paint is 'pooling' this means that you are using too much water. Try to use less, conversely if you have brush marks, you are either using too little water or overworking the area.



Above. 'Tea' and 'flat' wash. The left hand side image shows one wash applied to the square, this is often referred to as a 'tea wash' because it is similar to the watery nature of a cup of tea. On the right the deeper colour can be achieved by working with a stronger ratio of paint to water or by applying a second layer of paint when the initial wash is completely dry. The aim of the exercise is to achieve a flat smooth surface. **Below:** Washes 1 to 4 (applied to a circle this time). The top row is applied directly to dry paper and the bottom row to dampened paper.



2. Graded Wash

This is a useful technique for grading a colour into white. It will assist you in creating a highlight such as where a leaf or petal bends and catches the light, on a stem where there is a highlight or on a fruit. Can you see that a graded wash has been used on the stem and leaves of this hellebore?

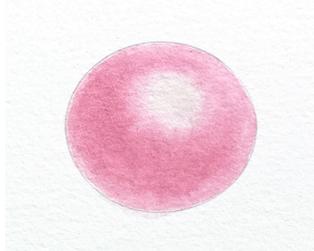


Exercise: To practice this technique draw 2 squares. Again, you may find wetting/dampening the square with clean water first helps. Begin at the top of the square in the same way as with the flat wash, when you are half way down the square, clean your brush with water and continue painting with the water. You need to work quickly so that the paint will blend creating the graded effect shown below. Again, you may add a drop of ox gall liquid to improve flow but this is not essential. As with the previous exercise try this out with different colours.

Optional activity: Experiment with different shapes, such as cylinders and spheres. Also try the technique on simplified leaves and stems.



Above: Graded wash. The left hand side image shows top to bottom gradation. The right shows right to left gradation. **Below:** a sphere with a grade into a highlight. In this case, dampen the whole sphere then add colour around the highlight first, allowing it to bleed into the damp paper to create a soft highlight, Then work to the outer edge of the sphere.



3. Blended Wash

A blended wash used when we want to create a smooth transition from one colour into another. It is similar to a graded wash but two colours are used instead of one.

For example, in a leaf or flower that has a transition from one colour to another, seen here in this rose hip, which is graded from orange, on the left, to red on the right. (Note: there is also a grade into the highlight)

Exercise: To practice this technique, first draw two squares. Choose two colours, you will find it useful to dampen the area with clean water first. The example below has a vertical blend, start at the left by painting a basic flat wash with the first colour (red), then when half way across the square, clean the brush and load with the second colour (yellow) and continue to fill the square, so that the two colours blend together.



If you find that the transition is not smooth and you have a line, you are working too slowly or do not have enough water. Conversely if you find that your colour blends too much, you are probably using too much water. Practice until you get it right.

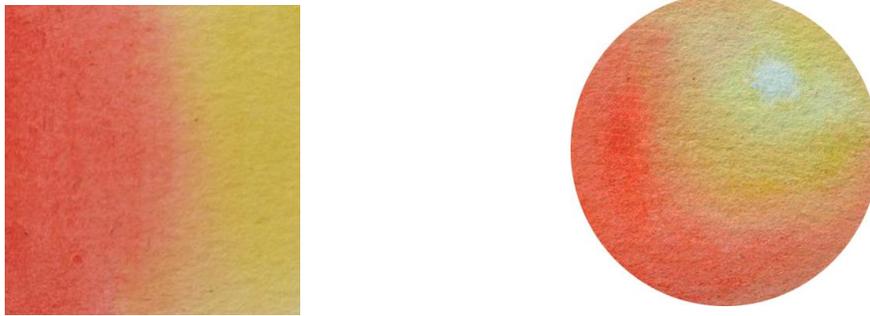


Figure 3. Blended wash using Scarlet Lake and Transparent Yellow. The sphere is painted with clean water first with the highlight left clear. The yellow is added working from the top right and allowing the colour to blend around the highlight. The brush is quickly cleaned and loaded with red to complete the sphere.

Optional Activity: Try painting some small round shapes with blending, such as the in the sphere (above) and which also has a highlight. Or try to find subjects where you see a blending of colours, such as a ripening fruit, such as these laurel berries. They are a typical subject where a blended wash is a suitable technique. Other examples include autumnal leaves and many fruit, such as apples and figs.



Tip: If you find that you are not quick enough to clean the brush and reload before it dries, try using two brushes and swap brushes for the second colour.

4. Overlaid Wash

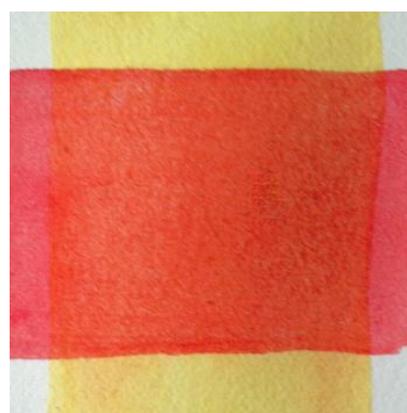
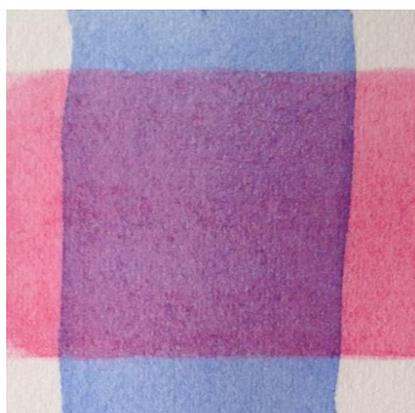
The overlaying of two separate colours can be useful in making a third colour. This is an alternative to pre-mixing the colour on the palette first.

It is useful for pink and blue flowers, which often have an element of violet. Or with red and yellow flowers, where there is an element of orange. The overlaid wash can be used to good effect in flowers where there are subtle changes in colour caused by light. Watercolour is perfect for these 'glazes' because it is transparent. It is also useful when you want to add a final wash to brighten (or dull) a colour.

In reality the wash does often not completely cover the entire area as in this exercise and is often applied or graded in selected areas.

Note: The order in which the colours are applied makes a difference to the final colour. So it's worth experimenting with different orders of colours. As a general rule only apply transparent or semi-transparent colour over the top of the first colour because opaque colours can mask the underlying colour. The first colour may be opaque or transparent.

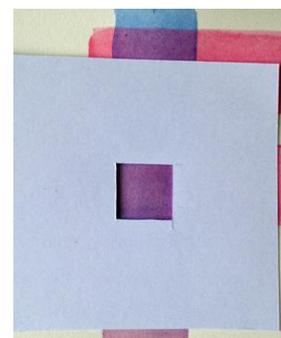
Exercise: Practice the overlaid wash using a fairly large flat or round brush such as a size 6. Paint the first colour as a flat wash in a broad band, approximately a 2.5 cm long by x 2.0 cm wide, as a horizontal strip of colour. Allow to dry completely. Paint the second colour over the first colour but working vertically this time. Below: I used Permanent Rose and French Ultramarine, you can see that a third violet colour is formed where the two colours overlap. Both of these colours are transparent so it makes little difference which order you apply them in. On the right I used Cadmium Red (opaque) and Transparent Yellow (transparent) which creates an orange hue. Opaque colours do not allow light to pass through as easily as transparent ones, so should not be used in anything other than the first washes.



Above: The effect created by overlaying two different coloured flat washes. On the left Permanent rose was applied first, then French Ultramarine was overlaid. On the right Cadmium red was applied first and Transparent Yellow overlaid.

Optional Exercises: Try applying the washes in different orders to create the third colour, see if makes any difference to the outcome of the third colour. You can also compare the overlaid colour to a pre mixed version of the same two colours.

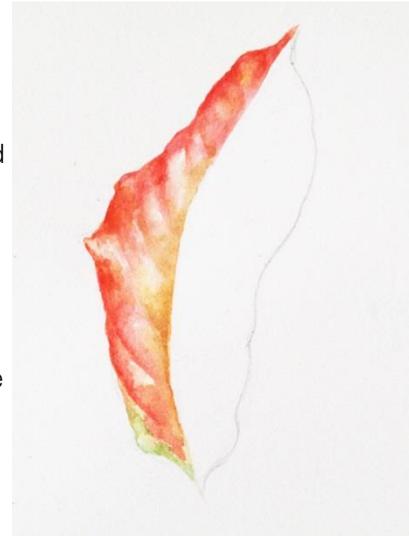
Tip: If you have trouble identifying colours, try cutting a small hole in a piece of white card and lay it over the sample to view the colour in isolation, i.e. without the influence of the surrounding colours. You can also use this card to identify colours in your subject material.



5. Wet-in-Wet

This technique is particularly useful in botanical painting for laying the foundations of a painting where there is variation in colour, such as in an autumn leaf. When painting 'wet in to wet' you allow the colours to run into each other in a controlled way. This type of wet-in-wet is generally a more controlled version of the technique used in larger landscape paintings. It has some similarities to the blended wash but requires more control in the amount of water used. Below is a basic break down of the technique. In botanical work it can lay the foundations of a painting by creating form, and acts as a good base before the use of other techniques. You can also work wet in damp and the amount of wetting facilitates the extent of the flow of the paint. See the example below which shows a leaf.

1. Start by applying clean water so that the surface is glistening wet.
2. While still wet, apply the basic hues of red, yellow and green individually and allow the paint to flow. Pick out the basic shapes, such as leaf margin, edges, veins and folds.
3. You may control and lift out any excess or lighter areas using a separate brush, a damp flat brush can be useful.
4. You can continue sculpting your work while it's still wet but be careful not to overwork it. Reapply more water if it dries out, and add more.



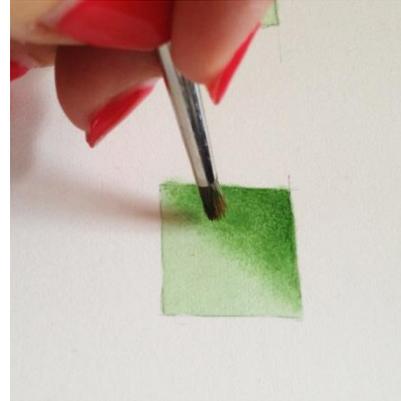
Optional exercise: Experiment with the wet in wet technique. Try using it to paint a multi-coloured subject such as an autumn leaf.

Tip: Work on one side of the leaf a time to keep it manageable.

More watercolour techniques

Dry Brush Techniques

Dry brush is a watercolour technique used on both paper and vellum. Despite the name the brush is not actually dry but more of a 'damp' brush approach, it is usually applied on top of a previous wash, either onto damp or dry surfaces. There are several dry brush techniques, it can be used to 'model' the surface of a subject to create a 3 dimensional appearance or to deepen colour in selected areas, or to add texture and it can also be used for fine detail. Once dry brush is applied it is *generally* not possible to apply further washes without moving the paint from the previous layer although it can be softened with a damp brush. Care has to be taken not to apply too much paint as dry brush can become heavy and unsightly.



Dry brush can be a fairly slow process compared to painting washes, so be prepared for your painting a little longer. There are broadly 4 different techniques using dry brush described below.

Activity: Look at the work of artists and see if you can identify those who use dry brush, two examples include, Susanna Blaxhill and Rory McEwen.

Technique A. 'Modelling' Dry Brush

This is a method of dry brush that can be used to 'model' surface areas on top of washes, such as on leaves, flowers, fruit and vegetables. Paint is built up using dry brush in layers to create the depth of tone required. It is also used for graded areas, from light to dark and in between veins. It works well if you use a size 3 brush and smaller sizes 1 or 2 for more intricate parts. I use a 'spotter' or miniature brush, which has shorter hairs than the more common 'round' brush.

To achieve this technique:



- First mix the paint on your palette to the required thickness for the level of cover required. For dry brush paint should be thicker with less water.
- Pick up the paint with a dampened brush, as size 2 spotter or miniature is ideal.
- Dab the excess paint onto a cotton cloth or spare paper.
- Use a spare piece of paper at the side of your work to test whether the paint brush is 'dry' enough and in doing so flatten the end of the brush to splay it into a chisel like shape.
- Apply the paint by using very small strokes in a cross hatching or circular motion, the brush should barely lift from the paper in this technique and the pressure should be very light. Make sure that you blend the strokes to create a smooth finish with no hard edges. Add further layers once dry to achieve the depth of colour required.

Exercises 2a. Modelling Dry Brush, Graded Square and Sphere

Graded square

Draw a 2cm square and paint with a light flat wash as in exercise 1. Once dry, use the modelling dry use the technique described to create a graded area at a diagonal within the square. The transition from the light to dark should be smooth and there should be no hard edges or brush marks. If you find you have hard edges, check that the level of dampness on the brush is correct by dabbing on the spare paper.



Sphere

Draw a circle approximately 2.5cm in diameter. Paint a light wash as a sphere with a highlight (graded into the highlight). Allow to dry completely. Take a size 3 brush and use the dry brush modelling technique to create a 3 dimensional sphere.



Optional Exercise: Practice the modelling technique on different shapes to build up confidence. The larger the area the more difficult it is to achieve a smooth surface. The more layers you apply the smoother the surface becomes but be aware that there is a fine line between achieving the 'right' amount and 'over working' the area, when paint becomes too thick and muddy.

Technique B. Sweeping or Dragging Dry Brush

This is, as the name suggests, a sweeping or dragging motion. The brush creates long dry strokes typical of the parallel veins in flowers and leaves and also builds texture. Useful for flowers, such as Calla lilies, lilies and tulips etc., it is also useful for stems and the long strappy leaves of the monocots and for the papery skins found on irises and onion skins.

To achieve this technique:

- Using a size 2 or 3 brush this effect can be achieved with pointed or miniature brushes. Load the paint onto the brush
- Dab the excess paint onto cotton cloth
- Use the scrap paper and press the brush down to splay the brush hairs slightly.
- Apply the paint over an initial wash or to clean paper using a sweeping motion. This will create a lined effect.



Technique C. Drawing Dry Brush



Drawing with a dry brush is used for picking out lines in your subject, such as on petals or leaves. Or for fine detail such as hairs.

To achieve this effect:

- Use a smaller pointed brush, such as W&N size 1 or 2, depending on the size of the subject.
- Load the brush using a slightly increased ratio of paint to water mix. This type of detail painting is generally one of the last details to be added.
- Wipe away the excess and shape the tip into a fine point.
- Apply the paint in a line using a drawing motion, so that a smooth clean line is achieved without lifting the brush.

Technique D. Stippling Dry Brush

This technique is used for small areas of detail and to create texture. It is used on subjects such as: pollen rich anthers, spots of a foxglove or leaf blemishes and markings. This technique requires a small brush and paint is stippled in small dots with the tip of the brush, a miniature size 1 is ideal for this technique. Colour is built up in layers from light to dark.



To achieve this technique:

- Use a spotter or miniature brush, size 0 -2 depending on the size of the area worked on.
- Load the brush with paint.
- Dry off excess on a cloth.
- Smooth the tip of the brush to a fine point.
- Apply the paint using small dots of paint.
- Build up in layers until the desired effect is achieved.



Final Exercise for Part 1. Incorporating the Washes and Dry Brush Techniques.

Select two **subjects** of your choice. Try to **identify which watercolour techniques** should be used. **Try to use as many of the techniques as possible between the two subjects.**

Paint the selected subjects using both the wash and dry brush techniques and **describe how you approached each subject by writing a short summary.**

Suggestions for this exercise: A leaf, petal or simple flower head, seed pod or fruit.

Examples:

Example 1

The watercolour process for a single lily leaf:

1. A flat wash of a light blue mix was applied and allowed to dry completely.
2. A second and third wash of green was applied to a dampened surface and to selected areas leaving highlights clear. Where the green is darker colour was added as a blended (green into yellow at the leaf base).
3. Sweeping dry brush technique was used to build up the leaf texture and delineate the areas between the veins.
4. Drawing dry brush was used to pick out the fine veins.

Note: Stippling dry brush could also have been used here if there were any leaf blemishes.



The watercolour process for a rose bud:

1. A blended wash of green and red was applied to areas.
2. The wash was graded out towards the highlights and lighter edges, such as on the calyx and sepals.
3. An overlaid wash of a yellow biased green was used on the selected areas of the bud second wash. Further colour was added to selected areas to strengthen the colours.
4. A selected wash of red was added to a pre dampened areas for the small area of petal.
5. Sweeping dry brush technique was used to build up markings on the sepals
6. Drawing dry brush was used to add details and to delineate the veins on the sepals.



See step-by-step examples of other subjects over the page.

Please email jpeg images of your watercolour techniques and two final pieces to coursework@botanicalart-online.com

Examples of watercolour process:

Laurel leaf



Final note on watercolour technique: In reality you won't ever paint perfect squares of colour in a botanical painting, so you probably wonder why you have been asked to do it here. I can't stress enough how important it is to spend some time at this point practicing the techniques within more formal shapes. It will help you to gain better control of the medium when you come to put it into practice. I know it's not always easy to do and don't worry if you have a few problems with getting the desired look, this is perfectly normal. As you progress you will also find that there is some manipulation of techniques but here we try to break it down into a systematic approach in order to understand the basic processes.

Often the common errors that students complain of struggling with, such as gaining clean smooth edges are due to uncertainty over technique rather than with other issues. I often hear 'shaky hands' mentioned as the reason clean edges cannot be achieved. This is seldom the case; it really is more about lack of confidence, which causes hesitation or too much water being used. You will notice over time that as you become comfortable and in control of the medium the hesitation diminishes and the technique becomes smoother.

The other important point to bear in mind is not to get too restricted by following everything as though it were a rigid 'rule'. You have to learn the subtleties of techniques with watercolour and develop your own approach. While I can teach you the foundations, it's up to you to go on and develop your own style. This will become clearer to you as you become more confident.