

Brushes

Choosing a brush is a matter of personal preference, but each brush hair type and shape has its own unique qualities. There are many varieties, shapes, and sizes. Brushes are made from different materials and absorb differently. The quality of the work is in direct relationship to the quality of the brush and the use of the appropriate brush for the purpose.

You should always use the best brushes that you can afford, as only good-quality brushes will allow you to achieve satisfactory results. Brushes of inferior quality will frustrate you because they won't perform properly. Most of the students' painting problems are often caused by inferior brushes, or by brushes that have been ruined by neglect. If you start with good-quality brushes and maintain them properly, they will perform well for many years.

A brush is a bundle of natural hair, bristle or synthetic fibers formed into a specific shape, tied, and glued into a ferrule, and attached to a handle. There are many different qualities of hair, bristle, and fiber, which affect the quality and performance of the brush. In addition, there is a definite science in the making of a brush, so that even a brush made with good quality hair but made poorly, will not perform well.

- 1) **Kolinsky** – This hair is known to be the best and most valuable hair used in brushes. It is from the family of sable, but the very best quality. The hair has a very high elasticity. It is fine, but very strong, with velvet-like tips. This allows the brush to hold its shape, if made correctly, and has a very nice spring. The brush holds a lot of paint and water, which allows the artist to complete a stroke without running out of color. If made well, the brush will have a very good point or chisel. An excellent brush for fired ceramic color, acrylic, or oil.
- 2) **Red Sable** – Also from the weasel, this hair is an excellent hair in making brushes. It does not have quite the same elasticity or tips as the Kolinsky, but also holds a lot of color and water. This can be a good-performing brush, with the same characteristics as the Kolinsky, but not quite the same performance.
- 3) **Squirrel** – The hair is a very absorbent hair, but very fine and soft and has little spring. Generally good for blending, shading and watercolor effects. There are different types of Squirrel hair, with the Blue (Black in color) Squirrel used widely in the ceramics and china painting.
- 4) **Goat** – Goat hair comes in mostly black or white. It also comes in many different levels of quality. Goat hair is very soft and has a good absorbency. It is widely used in Fan Glaze brushes, as well as Sumi brushes and Mops.

- 5) **Camel** – An all-encompassing term for brushes made from a variety of different hairs, none of which are camel hair. This is used for inexpensive brushes, for which performance is not critical.
- 6) **Synthetic/Nylon** – Many brushes are now made using various types of synthetic fiber, such as Taklon, Rayon, and Nylon, and available in many different colors. There are also different qualities in the synthetic fibers used in brush making. And the brush making techniques are also critical as to how the brush will perform. As these brushes are made from a plastic-type of material, their absorbency is quite low. Therefore, one must reload the brush quite often. The best synthetic brush cannot perform as well as the best natural hair brush. These brushes are mostly used for acrylics.

NOTE: Acrylic colors do not have a great deal of moisture and are heavy, therefore; a stronger less pliable fiber is needed to complete the job. It should be noted, this type of fiber is difficult to clean thoroughly and there is a tendency for color (acrylics) to get caught up in the ferrule of the brush, especially if the brush has been overloaded with color.

- 7) **Bristle Brush** – These come from the body of boars and hogs. Bristle brushes are stiff brushes; they may be used to apply opaque stains. Used with drybrushing techniques as well and should not be used for fired colors.
- 8) **Blended Brush** – Has natural hair and synthetic blended in the brush. Used for ceramics and general decorating. The natural hairs hold the brush together when completing brushstrokes. These brushes are generally lower in cost.

A demonstration between the natural hair and synthetic brushes may be necessary to the students to show that natural hair holds more water and color and performs better than synthetic.

Care and Cleaning

1) Just a few minutes of your time can assure longer life for your most important investment in quality brushes.

- New brushes come shaped with a sizing material on them.
- The manufacturer has placed a starch-like material in the brush for transport.
- This material is plain old fabric starch and should be rinsed out of the brush.
- Gently rinse the sizing material out of your brush with water. The brush is ready to use.
- Also, the plastic covering on a brush should be disposed of properly. These plastic covers are for shipping purposes, as is the starch. Trying to put the covering back on the brush can cause damage to the brush hairs.

2) With most water-based ceramic products you clean up with water and mild soap or brush cleaner.

- It is always better to use a very mild soap such as Ivory bar soap. It is not good to use soap with additives or degreasing, etc., such as dish soap.
- Brushes should be swished in water vigorously.
- Never bang or beat the brush on the bottom of the water container.
- For Natural hair brushes never drag the brush across those plastic cleaning pads. They will only break the hairs. Keep swishing the brush until all of the color is removed from the reservoir.
- At the end of the day rinse the brushes in cool, running water, working the bristles gently against the palm of your hand. As you rinse the brushes, add a small amount of brush cleaner or mild soap to in your hand to help clean the brushes thoroughly. Continue working the brush in your palm until no more color is released from the brush.
- DO NOT pull and twist the hair.
- DO NOT use very hot water. This can break or otherwise damage the hair.
- After rinsing all of the color out of the brush, you should reshape your brush with a little soap on your fingers.
- Lay the brush and let it dry before storing in any other position.
- **Never use hot water on natural hair brushes.**
- Before reusing the brush, rinse out the soap and open the brush.

NOTE: This usually will not work for synthetic fiber. Once these man-made fibers get out of shape they will stay out of shape forever.

- 3) Pinch the water out of the brush before reloading or storing the brush. The pinching removes any trapped color that may remain close to or in the ferrule.
- 4) To store, let the brush lay flat on the table to dry.
 - When dry, store upright with the bristles standing free and not resting against anything that will misshape the reservoir and tip. This may be a jar, brush caddy, etc.
 - To transport, use a brush carrying case, preferably one made from fabric that will absorb the moisture of the brushes if damp.
 - Plastic containers could cause the moisture to be held in and cause damage to the brush.
- 5) When cleaning synthetic brushes, soap and water should be used.
 - And alcohol can be used as well.
 - The alcohol can be denatured, or you can even use gin or vodka.
 - The alcohol will remove the color from the ferrule.
 - Again, let the brush dry flat on tabletop before storing away.
- 6) Never let the brush soak in water for any length of time.
 - The reservoir will become misshapen and the wood (Handle) beneath the paint will absorb the water and swell.
 - The swollen wood will crack and in time the paint and enamel will peel away from the handle.
 - Rinse the brush and allow the brush to dry lying down.
 - As the brush dries note that sometimes the hairs become frayed and look damaged. This is normal, when dampened again the hairs will line up in their normal position.
- 7) New brushes may lose a few hairs at first but will stop shedding after the first couple of times they are used.

The art of brush making is an exacting skill mastered by few. For example, in Germany, brush makers must go through three years of apprenticeship, and an additional five years of brush making before they are allowed to work with the best quality Kolinsky.

Even the preparation of the hair is an exact science, as it is imported from many different countries. It must be cleaned, dressed, and graded for quality. However, some brushes are now being mass-produced, using low quality hair, and inferior brush-making techniques. The best brushes are still made by hand, using the techniques of the masters.

At first students will be appalled at the cost of the good brush, but experience soon teaches them that a good brush is well worth the cost. The Wal-Mart mentality will soon disappear once they have used a good brush. You cannot force a student to buy a good brush but allow them to try one of yours and they

will see the difference and want to know why their brush doesn't let me do the same stroke. They will soon see that you are not trying to just sell them another brush. Economy brushes have their place, use them for applying wax and latex masks, etc.

Brush Fundamentals

There are fundamental procedures for all brush strokes that make desired looks easier to achieve. Instructors have their own styles of completing brush strokes, however, most follow a few general rules that foster immediate excellence. This information can be used for a variety of brushes.

Brushes may vary in size by manufacturer. I recommend that you use soft natural hair brushes, which will allow you to achieve the same color depth that is seen in the Colors For Earth Seminars pieces. If using a synthetic or taklon brush you may need to apply more coats than recommended in instructions because these brushes do not hold as much color as the sable, black squirrel, and white goat hair. A sable (natural hair) brush is like your own hair it holds moisture when it is wet, therefore it will hold the water or product you need it to. A synthetic (man made hair) has a coating on it that is waxy, and the product wants to slide right off. It doesn't have anywhere for the product to absorb into.

- Brushwork in general is accomplished through the use of color, motion and pressure. This is true with any brush, and specifically with a liner brush.
Colors – Paint colors are the method used to load them on a brush
Motion – The way an artist moves their arm, hand, or wrist while painting.
Pressure – The amount of brush force or pressure used on a piece while a stroke is being completed. Demonstrate on back of student's hand for pressure.
- When doing a brush stroke the brush should be held almost straight up or at a ninety-degree angle to the ware, ninety percent of the time. This position ensures that color will flow down the reservoir of the brush and that artists will benefit from the full play of the bristles against the ware.
- Always dampen a brush before using it. However, after wetting the brush, be sure to remove excess water from the bristles by pinching the reservoir between your fingers and thumb or pat on paper towel or sponge.
- Make sure all colors being used are the same consistency. Artists cannot properly load a brush with colors of different consistencies. A color that's too thick will not load onto a brush that already has very thin color on it, or vice versa.
- When loading a brush, pull it through the color; do not just plop the brush into the color, then proceed to the stroke. You should stroke the brush into the paint, then apply pressure as you pull some paint away from the puddle, which will cause the hairs to spread. When you release pressure,

the hairs will draw together, pulling paint into the brush hairs. Repeat this process several times on all sides of the brush until the hairs are completely filled with paint. A brush can be re-shaped as you're pulling it through the color, and the bristles are pulled back to its point for a round. For the square pat on both sides until you have a chisel edge.

- For most people, pulling a brush toward oneself is easiest, and strokes can be accomplished without difficulty. However, many left-handed individuals might find it easier to work away from themselves. Left-handed people are used to pushing when they write, whereas right-handed people pull. This muscle conditioning plays an important role with brush strokes also.
- When completing any brushstroke, remember that the last color loaded onto the brush is the first color off. For example, if an artist desires white daisy petal with a yellow tip, the brush should be loaded in white and its tip in yellow. The yellow will be first off the brush. If a yellow daisy petal with white tip is desired, then the brush should be loaded with yellow and tipped in white.

Fully Load - Always fully load a brush before attempting any brushwork. Pull the bristles through the paint flipping the brush back and forth until the color is $\frac{3}{4}$ the way up the bristles. You cannot complete a stroke with color only on the tip of the brush.

Double Loading – Is usually done with a flat or square shader brush but can be done with a round also. Fully load your brush with light color and keeping the writing on the handle of the brush towards you, corner load the bottom corner in another color. Blend the two colors on your brush by gently stroking on your glazed tile until the colors blend in the middle. Turn the brush over and then blend so that colors meet in the middle on both sides of brush. To re-load brush, dip each corner of the brush into the appropriate color and blend again.

Float of Color - Fully load your square shader with water and drag the brush off the side of water bowl on both sides to remove some of the water. Place one corner of the brush in your color and blend the color on the brush by touching the brush flat side to your tile or palette and applying pressure quickly a couple of times, and this will help the color and water blend so that you don't have a harsh line. You should see a nice graduation of color fading to water. Rinse and reload your brush for every stroke or as needed. Don't let the color creep across your brush and dirty it up. If this happens then rinse well and start again.

Floating takes practice if you have never done it before. You should use the largest possible brush in the area you are working to shade or add highlights. To achieve a nice highlight or shadow you will need to build the float up in multiple coats. Don't try to achieve it in one coat that usually becomes too heavy and doesn't look blended. Allow your floats to dry in between coats or you will end up pulling off the first layer of color. If the area that you are working on seems very

dry and your brush load will not carry the length of the area you are working on, you may have taken out too much water or sometimes I will mist the area lightly with water before I do the stroke. If the color and water run off the brush, then you may have too much water in the brush.

Corner Load: Fully load square shader. When adding a second color to the brush, try to get into the habit of keeping the darker color to the left corner of the brush when holding the brush with the writing up. By doing this you will always know where the darkest color is on the brush. You need to tip the corner in color about 1/4 of the way across the brush. After loading be sure to press and pull the brush on a clean area of the palette to blend the colors together.

Pressure Stroke: A pressure stroke is where you touch the point of the brush to your piece and rock or sit the brush back, and then forward, and lift up which creates a teardrop shape stroke.

Comma Strokes: With a round brush, press, pull and curve the brush while pulling it, then lift it off the ware. Smaller strokes are completed with less pressure and pulling with the same size brush.

Side Load: Dragging the side of square shader brush through a color so that the color is all the way down one side of the brush. Hold the brush upright and stroke the flat of the brush on the palette. Go back and forth in the same place until your color is blended, but not all the way across the brush. It should look like color gradually fading to water.

Tip: Fully load brush in color of choice. Tip the end of the brush into a second color. If needed pat the tip of the brush on a palette to reshape the brush to a point. Remember what goes on the brush last comes off first so you may have to re-tip when doing multiple strokes to keep color consistency.

The Parts of a Brush

There are five main parts to a brush.

1. **Tip** – this is the end of the brush and when doing most brush strokes the brush is brought back up onto its tip. Note: the Shader does not have a tip, but rather a chisel edge.
2. **Reservoir** – the area of the brush that holds the color, sometimes known as the belly of the brush or the pocket of the brush.
3. **Heel** - This is where the hairs meet the Ferrule (metal).
4. **Ferrule** – the metal section of the brush that is of a tubular nature, not soldered together. This piece is glued onto the handle and crimped. The opposite end secures the brush-hairs properly in place. Inexpensive brushes usually will have a soldered metal ferrule.
5. **Handle** – usually made of painted wood. Length and thickness designed to give some balance in completing the stroke. Quality brush handles are usually dipped several times in a hard drying enamel.

