

# Scale Tipping: An In Depth Study.

*By Ed Barrett & Ted Richmond*



## **WHAT IS SCALE-TIPPING?**

Scale tipping is the artist's way of reproducing the metallic like reflection of the real fish. The reflective qualities of the fish are accomplished much like a newspaper or comic book picture, 'dot by dot', or in a fish carver's world 'scale by scale. Thus, by painting each scale with a reflective material without blocking out the color, you get the realistic effect that you seek.

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High quality reference photos should always be present and viewable during the painting phase. No matter what your skill level, this reference is invaluable. One of the things you will notice on most live fish, or highly detailed photos, are the scale reflections. The scale itself is mica like material, which reflects silver or gold light back to your eye. Underneath the scales are the colors of a fish's skin. Interestingly, when a fish is out of the water briefly, the protective mucous and water enhance the reflective qualities of the fish, causing it to appear much brighter and more reflective than their comparatively dull appearance in the water. Nevertheless, when painting the fish in an underwater pose you should still paint in the reflective qualities, because this is normal and "expected" by your customers and judges alike. Some artistic license here is a good thing; so do not paint your fish as they might actually appear under the shadow of overhead cover, but rather as they might appear in very shallow water in sunlight or as they might appear in an "out of water trophy" picture just before release. It will gain many more compliments and ribbons.



Detailed Photo

### **WHY SCALE TIP YOUR FISH?**

Scale tipping your fish creates that final finished look by enhancing scale texturing with mediums that have reflective qualities or with complimentary colors that contrast with background colors as seen in some reef fish. Using scale tipping in your finishing process will get your sculpture noticed because of the contrasting light over dark colors that creates depth, a three dimensional look, in your painting that highlights scale patterns and textures.

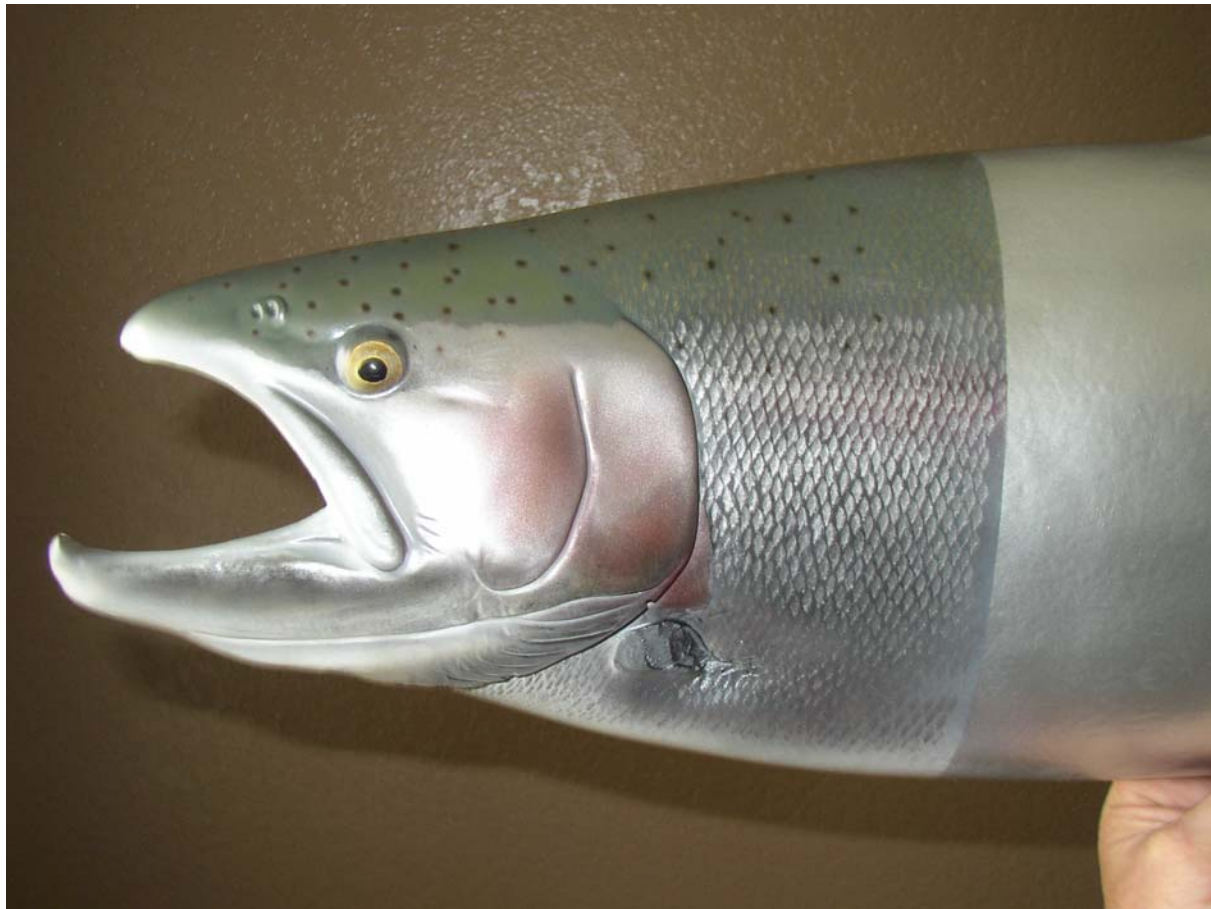
### **SURFACE PREPARATION FOR SCALE-TIPPING**

Prior to adding scale texturing the surface is prepared by sanding to a final grit of 180 to 220 sandpaper. This allows for a smooth uniform surface on which to place the scales using a number of methods. Some methods render very realistic scaling while others are for quick commercial applications that are more for effect than anatomical accuracy. Most experts agree that the quality of the scale-tipping is in proportion to the time it takes to do it. There are certain situations where scale size determines which scaling method can be used. An excellent reference

on creating fish scales is contained in **Ed Walicki's Classroom Series "Creating Realistic Fish Scales"**. Which ever method you use, please take all the time necessary to produce outstanding work; you will be rewarded for the effort. Short cuts generally lead to lower prices on pieces for sale, and a lot of time spent trying to camouflage your mistakes. In the following article we will discuss some common methods of rendering scales, what scale sizes are appropriate for each method, tipping application methods and wood species that are best for the job.

### **Hand Painted/Stencil Scales:**

Several shows across the country have 'smoothie' as a category. Smoothie simply means that no texturing at all was done to represent the scales; each scale is painted on the smooth surface. The scale tipping for this type of scale would be airbrushed using a stencil or hand brushed because of the smooth surface. Smoothies lend themselves well to small, medium or large scales and any good carving wood can be used.



Hand Painted Scales

**Ball Ground/Carved:**

Using a small ruby or diamond ball in a high-speed micro motor to grind furrows into the wood in a crosshatch pattern renders medium to large scales very effectively; and may be able to simulate small scales with some practice. Scale patterns are first drawn in with pencil, then ground or carved. Occasionally, the trailing edges are burned and or sanded to get the desired effect. These scales can be hand brushed, airbrushed, applied by fingertip or a combination of these methods. The woods of choice are Tupelo and Jelutong, although basswood may substitute if care is used to further prepare the surface to eliminate “fuzzies”.



Ball Ground Scales

### **Burned**

Scales may be burned into the wood using a burning pen with scale shaped or knife edged tips to create the edge of each scale and give some depth to the scales. Scales that are burned in are the most common for high quality carvings for sale and competition. Airbrush, hand brush, and fingertip methods as well as stencils may accomplish scale tipping the burned in scales. The woods of choice are Tupelo and Jelutong; basswood may substitute because the burning process eliminates any “fuzzies”.



Burned Scales

### **Knurled Scales**

This method was introduced by Clark Schreibeis and is very effective to create small scales. Whether carving a miniature crappie, or a trout of up to approximately 12 inches in length, this texturing method can be very effective. Knurled scales are created by rolling a round piece of metal embossed with a crosshatch pattern onto the wood. Commonly found on tool handles and dental tools the crosshatch pattern leaves high and low spots that are a reverse scale pattern. When reflective powders are rubbed onto the knurled surface and then removed by rubbing it's the powders that remain in the low parts that look like fine scales. These tools are used on smaller fish, trout, char, and salmon in general, or are used on a miniature. The knurling technique produces better results in softer woods like Tupelo and Jelutong and is more difficult to accomplish in the harder woods like Basswood or Sugar Pine.



Knurled Scales



Knurled Scales

### **Rolled Scales**

First developed by Bob Berry, this method of making scales uses a nail head that is fashioned into the 'negative' shape of a series of scales. The scales are ground into the rounded sides of the nail head. When the nail is rolled across the wood surface it leaves a scaled appearance. The resulting scales can be varied in size and shape by crafting tools with different sizes of scales. The different sized scales are created with differing depths of the cut used to create the scallops on the side of the nail head. These tools impress a scale texture that is very convincing. This method is approximately 5 to 6 times faster than burning scales in one at a time. With this method, as well when using the knurl method, it takes some practice to achieve realistic scales and be aware that using this tool for extended periods can be very hard on your fingers. Don't worry though because in couple of days you will feel your fingers again. There have been recent improvements to this method by using an eyebolt with a tool handle inserted at one end. (See Dale Barrett article in issue 1 of NFCG newsletter or on [Fishcarving2@yahoo.com](mailto:Fishcarving2@yahoo.com)) This produces less fatigue and reduces the tooling marks. Scales may be rolled on for small warm water fish, and are very effective for Trout up to the 17-inch range. The quality of scales produced with this method can be used on competition pieces. Scales that are small to medium in size can be easily rolled into Jelutong, Tupelo and, with somewhat more effort, into Basswood. Tipping can be applied either with a small brush or fingertip rubbing method.



Rolled Scales at a Distance



Rolled Scales – Close Up

### Veil Scales

Veil scales are created by spraying semi-transparent coats of silver or gold over wedding veil material that is adhered to the surface of your carving. Any smooth surface will work well for this method. Once the paint has dried, the veil materials are carefully removed and what you have are very uniform scales the size of the openings in the veil material. Review the CD, **“Painting a Brown Trout” by Ed Walicki** for an in depth study of this scaling technique. This method of scaling can be used effectively on medium to small scales found in salmon, trout and minnows. Similar variations of using wedding veil for scales can be very effective even for competition; it has a rich history (See Eric Thorsen’s “Mystery of the Redd”, 1992 Best in Show, World Fish Carving Championships) of success in competition. Scales are uniform, regularly spaced and work well with airbrush or hand brush methods. Rick Roth suggests using a veil as a grid to lay out the scales. This technique produces even, uniform positioning and size of the scales. This reduces the error of drawing or carving bigger scales when you get closer to being finished. This method may be used with any wood. The paint must be applied with a spray method, because a brush may move the veil slightly and ruin the effect.



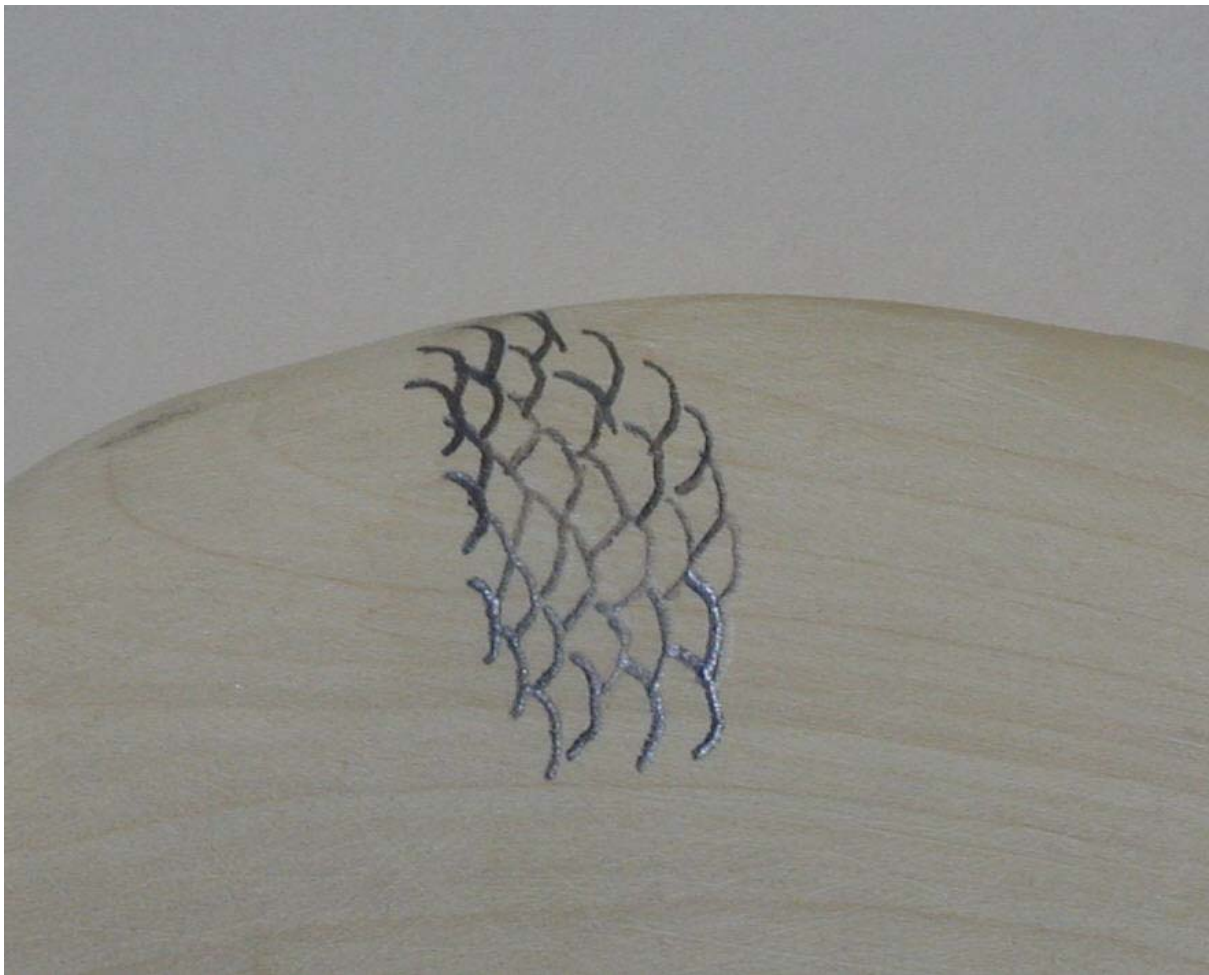
Veil Scaled: Silver sprayed over darker background colors



Hexagonal/Octagonal Veil Scale Material – Veil method shown here vividly illustrates uniform and consistent scales.

### **Drawn Scales**

Scales may be completely drawn in by hand or, in some cases, used to change sizes within transition areas of burn-textured scales. Scales that require a different size scale to close up a gap may be easiest to do by drawing them in. By using a small ball stylus, ballpoint pen (preferably a pen that has run out of ink), or a pencil (8-9H) pressed into the wood can give convincing texture. Scales drawn in may be difficult to keep consistent, but are good for the transition areas. Again, the wood that is preferred for this method would be jelutong, tupelo or basswood. Tipping is applied with a small brush, fingertip, or airbrush stencil.



Drawn Scales

### **Larger scales**

Specialty fish or larger scaled fish are usually carved, drawn, burned and sanded. Sometimes using all four methods together will create the right look for the larger scale. Scale-tipping these scales are a challenge, but best accomplished by airbrush due to their size and need for a soft edge to the 'scale-tip', but artist brush can produce outstanding results when dry brushed.

Typically these large scaled fish would be saltwater dwellers. Any wood that is used for carving will do well with larger scales.



Large Scales of a Parrotfish in progress

## SCALE TIPPING MEDIUMS



There are a number of scale tipping mediums that are used today such as thickened acrylic paints, waxes, powders, oil sticks, gel or felt tip pens and foils. Many of these are available at your local craft and art stores while others are available at taxidermy or carving supply houses. In the following table are types of mediums with listed brand names and how they can be applied. These are the basic materials available and because there are fish carvers always inventing, the list is ever changing.

### Common Scale-Tipping Mediums and Their Application

Medium	Brand Name	Application
Wax	<u>Treasure Gold</u> Waxes in Gold, and Silver	Use straight or mix with mineral spirits and apply with artist brush or fingertip
Cream Paints	<u>Delta</u> Stencil Paints	Use straight with fingertip or foam applicator
Acrylic Paints	<u>Lifetone</u> , <u>Polystranspar</u> , <u>Wildlife Colors</u> in Metallic thicker <u>Wildlife Accents</u> in Iridescent or Interference By <u>JoSonja/Golden/Liquitex</u> <u>Createx Satin Gold/Pearl Silver</u>	Typically brushes are used; can be applied with fingertip; may be used over dried lacquer paints, often the settled pigment in airbrush paints are used.
Iridescent Powders	<u>Polytranspar</u>	Applied dry with fingertip, the excess is wiped away, leaving depressed areas filled with powder which is then sealed in with gloss
Gel Pens	Any brand that matches desired color	Stippling or drawn
Felt tip pens	<u>Sharpie Silver</u> , <u>Pilot Gold Marker</u> (Fine Tip)	Stippling or drawn
Foils	<u>Delta Renaissance</u> Gold or Silver foil leafing	Applied to the raised portion of scales with adhesive, when lifted off, only the raised portion of scale retains foil, creating a tip of metallic foil. Does not work with smooth fish.
Oil Stix / Paint	Matuska Supply Rub on Kit # 1 or 2, <u>Shiva</u> Iridescent or Opaque colors	Applied with brush, the stick could be thinned with any thinning agent for oil paints or Brush Magic from Wasco

### SCALE- TIPPING INTERPRETATION

The shape of the tips and the number of scales that receive the tips are reserved for the artist. Subtlety is the key, using the actual fish or detailed photos for your guide. The more realistic tipping has many steps to the completion. Painting and repainting the tips and finally overlapping and over painting as necessary will produce terrific results. Experiment and practice to find the method that works best for you. To guide you on your creative journey, this article attempts to give you the collective wisdom and experience from some of the most noted artists and World Champions in the Fish Carving World on a small but critical part of creating your own master piece.





AWESOME !!

Lance Lyons illustrates beautifully the different colors layered over bright scale tips produces fabulous depth.



### **SHAPE AND LOCATION OF SCALE TIPS**

Bob Berry uses a fast method for his commercial pieces. After nearly all of his painting is complete, Bob uses a felt-tipped silver paint-marking pen to put a scale pattern over the body from the back down to where the black spots end. The scale tip locations are placed in a lazy “S” diagonal line. Once you start, he points out, continue straight through until you finish. If you have a black spot or two that are not just right, you can correct them with this silver scaling. The scale tips appear to be circles or upright ovals on a fish scale, and are placed at the center of the visible part of the scale.

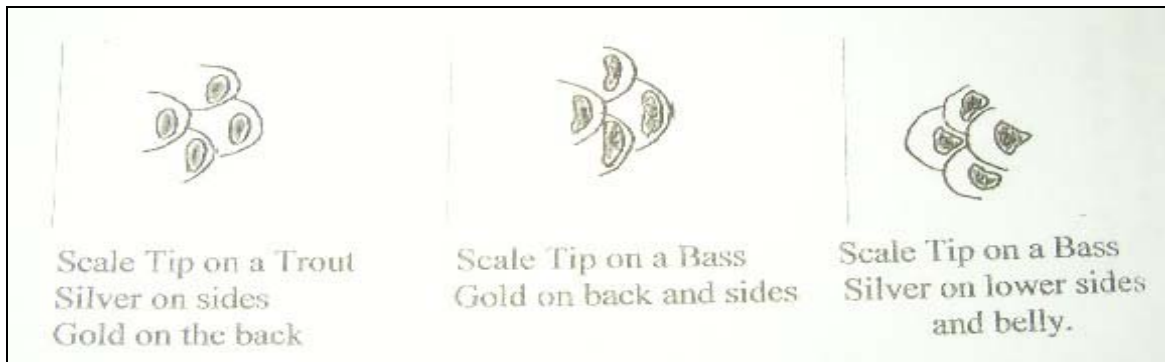
Tom Sexton suggests that not all scales are tipped. He creates the pattern that he sees in the fish using what he sees to tip the appropriate scales. While he was specifically discussing scale tipping a largemouth bass, the same is true with most warm water fish and many coldwater fish as well.

Tom pointed out that the scale-tip placement for largemouth bass may be located differently below a largemouth bass' lateral line and more pronounced near the belly. These scale-tips he places in the low spot where the scale dips down underneath the scale in front of it. See diagram 1.



**Diagram 1**

Largemouth Bass photo close-up reveals scale tipping placement above and below lateral line.



Dark spots on scales represent placement and shape of scale-tip reflective media.



## **APPLICATION TIMING**

Mike Windauer does preliminary scale tipping on steelhead. He suggests that scale tipping that is done too early in the painting process will be covered with subsequent coats. Scale-tipping done when the painting is completed will be too prominent. The idea is to have the scale-tipping show but not call attention to it.

Mike scale-tips and paints the base coat before inserting the fins because he finds that the fish is easier to handle without them. The base coats of black, off-white, and red have been applied and the scales tipped applied with a silver marker. That is followed by a reapplication of the base colors ranging from green to red.

Ed Walicki paints all his foreground colors and then scale tips with a small brush using Createx Satin Pearl Gold and Silver Pearl acrylics. After this he again paints the fore ground colors as he observes them in his reference. Ed says if you can see your scale tipping jumping out at you at 10 feet then you need to tone it down.

## **APPLICATION METHODS**

### **Photos of fish that have been scale tipped by different methods**

Richard Roth scale-tips a trout with silver pearl essence, applied with a #3 brush whose tip has been cut off. Rick dips the brush into the paint and dabs a small amount of pearl essence onto the scales where he tips all the scales on the upper part of the fish and about half in the lower area. The dab of pearl goes in the center of each scale, leaving an area of paint as an outline. Pearl essence is available in art and taxidermy supply stores. It consists of pigment to which has been added either crushed pearl or mica to create a slightly reflective surface.

Mike Windauer begins the painting process for a large steelhead by applying base colors with the airbrush and then scale tipping the entire fish with a silver felt-tip marker. Mike tips scales on top of a steel head with a fine dot, and a larger dab of paint on the scale in the sides. Mike also re-tips a few scales at this point to highlight them and avoid a uniform appearance. Mike again scale-tips the steelhead above the lateral line, this time using gold. The same is done with the pink stripe of the steelhead where he uses iridescent red over the previous silver scale tipping.

To scale-tip a Brown trout Bob Berry uses a gold paint-marking pen with a fine tip. He teaches to scale the back and side down to and around the lowest spots. Work slowly, developing a rhythm and pattern. Don't stop until you've completed an entire side. Shake your pen occasionally. When dry use a Raw Umber wash over the back and side, heaviest on center back to tone down the scale tipping for a more realistic look.

## **BASS CASE STUDY TOM SEXTON**

### **Tom Sexton**

One good method of tipping utilizes "unstirred" water base paint and a small artist brush (4/0 round, or filbert). This method involves scooping out the settled pigment from the bottom of an 'unstirred' paint container and applying this pigment to the fish with the paintbrush. Colors that can be used are any of the gold or silver pearls. Scale tipping in this manner with the water acrylic paints has produced good results for me; the only draw back is that at times they tend to "cake-up" and appear lumpy on the fish. Therefore, you will have to learn how and when to thin them if you choose this method.

The method gold tipping that I personally use and recommend involves using Treasure Gold metallic wax (the gold color that I use is called "Classic Gold"). I use a small artist's brush (4/0 is ideal) to apply the wax, and I use mineral spirits for thinning it. Gold tipping is the last step I perform before applying the final gloss coat to the fish. I like using the wax because I have 100% complete control over this medium. If I make a mistake, or don't like what I have produced, all I have to do is wipe it off. I can still remove it even after it has dried "provided that I haven't applied my final gloss over it.

I believe it is important to have a relatively slick and smooth surface to apply the wax to, because if you happen to make a mistake it will be much easier to remove this mistake from a smooth surface rather than from a rough surface. This works out good, as the painting step “prior” to the gold tipping step is the application of a moderate coat of Wet Look Gloss, and then the shimmers. This leaves a nice slick surface. The amount of wax used to tip one fish is so minute, that if you purchase the ½ oz. container I would venture to say that it will become a family heirloom that can be passed down and used from generation to generation.

To prepare for gold tipping, I recommend using an empty soda can for a palette. Turn the can upside-down so that the concave bottom off the can is utilized. Pour a small amount of mineral spirits or turpentine into the bottom of the can, dip out a small amount of classic wax and apply it on the rim of the can (do not put the wax into the mineral spirits). Dip the tip of your paintbrush into the mineral spirits and pat the gold wax to thin it slightly; then apply the wax to the rear edge of a scale. These spots should not be bold; they should be subtle but noticeable.

If I were scale tipping a bass, I would apply the gold tips to nearly all of the scales on the upper half of the fish and allow them to dry (usually no longer than 5 minutes); then I would apply my final gloss coat.

If you make a mistake while you are applying the spots, don’t panic; just wipe the mistake off with a soft dry cloth. If you don’t like the looks of your tipping, after the wax has dried – don’t worry, just dip a soft cloth in mineral spirits and wipe the spots off with no concern of damaging your prior coats of paint. (See what I mean by 100% control?) If your spots are too bold or contrasting, allow them to dry and lightly buff them with a soft cloth to the desired value. (This step will actually remove the wax, so don’t rub too hard for too long.)

If you fell that your gold spots appear “too gold” or too intense, and you have already applied your final gloss coat. Again, don panic, as this can be easily remedied as will. To tone down your posts simply spray a light application of a darker valued paint over the gold spots.

## **WHAT DO THE EXPERTS SAY?**

We asked several world champion taxidermists and woodcarvers for their keys to success. In the following are examples of scale tipping techniques that have proven to be successful for each individual artist. For the detailed explanations of what they said, please review the article for terms and concepts. Some were very forthcoming with their “best tips” for excellent results in your scale-tipping efforts. As students, a starting point would be to focus on a technique that applies best to your current carving. Remember that you can experiment and build on what you find here. Like judging critiques these are represented as alternatives for you to consider as well as insights to how these individuals have filled their trophy cases.

Practice your techniques, work to your potential and your own satisfaction, you are the ultimate judge of whether you have created the best piece you can produce. To do your best work remember what is important is obtaining the desired results not how much time it takes to get there. Have fun and enjoy the wisdom of these experts.

## Bob Berry

- Having different shades of colors is important- Scale-tipping paints for example gold and silver come in different shades. Obtain 2 or 3 different shades of your tipping colors to add depth. Change the shade of the paint color as you apply multiple scale tipping and as well change the size and shape of the scale tipping at each application.
- Apply scale tipping the first time then go over it again or occasionally a third time, each time correcting and refining the individual scales. He suggested seeing his paint schedule for **“Painting the Rainbow Trout”, step #14**
- How I scale-tip my fish depends on its size and scales. I use a fine-tip Sharpie silver-marking pen for fish in the 14”- 20” range. For larger or smaller fish I use bright metallic silver and a hand brush that will give me the size scale I need for that fish.
- Silver or gold scale tipping. Good lighting is paramount for this step. Depending on the coloration and reference photos, I tip every scale on the side of the body, switching from silver to light gold as I transition out of the spot pattern into the yellow or amber side belly. If the belly color is more of a true yellow, I’ll use Iridescent white or silver pearl and switch to gold as I transition from the side onto the upper back. Let your photo reference be your guide. See Bob’s painting information in his **“Complete Guide to Painting the Brown Trout “, step #13**
- To determine which reflective base coat to use consider the basic color of the fish. For green or blue fish use silver base coats and for yellow or red fish use gold.
- For a scale tipping example on a Rainbow, gold tipping is applied from the top of the back to just above the red stripe. At this transition area above the stripe scale tip gold slightly down into the silver tipping in the stripe area and tip the silver slightly up into the gold tipping to avoid a discernable color line. From the transition area above the stripe scale tip silver down to the edge of the belly. Remember that the scales are larger in the side and become smaller as they approach the belly, top of the back and caudal peduncle area. After applying the first round of scale tipping wet blend washes of Pale Green on the top of back, Pale Gold in the transition area, Pale Red in the stripe area and Iridescent White in the side down to the edge of the belly. For the second application of scale tipping vary the color shape and size of the scale tip from the first application. Gold and silver scale tipping on the same scale would take place at the transition of gold and silver placed randomly and sparingly.
- Use washes to tone down your scale tipping. Not only can they be wet blended but they can also be stippled and blotted with sponges to create random intensities of color in transition areas.
- Do your scale tipping in acrylics over lacquer paints or clear sealer and if you make a mistake remove it with alcohol or mineral spirits if you are using waxes, oil six or rub on.

## Clark Schreibeis

- If the scales are the knurled type go ahead and now rub in Silver Pearl Luster Pigments (dry on the bottom 2/3 of the fish and Warm Gold on top 1/3 of the fish. It is important to rub off with damp hand all the tops of the knurled surfaces until only the pearl is showing in the scale holes. If you are going to scale tip the scales using a small artists brush then use Gold Treasure Wax for the top 1/3 and Polytranspar Wa-Silver Pearl for the bottom 2/3 of the fish. Don't shake the container, but use pigment scraped from the bottom of the bottle.
- According to Clark's "**Brown Trout Paint Schedule**" Browns are scale tipped after spotting to allow for the scale tipping to go into the halo edges.
- After scale tipping the Brown apply Wildlife Colors Transparent Base to seal in the scale tipping.

## Jeff Compton

- Keys to Successful Scale Tipping; Have patience and don't get in a hurry for your work to be consistent in quality; Have available and use different kinds of scale tipping mediums such as Shiva oil stixs, iridescent and interference acrylic by Jo Sonja, Createx, Golden and Liquitex.
- When using the finger tip application method, be sure your scales are laid out correctly, and textures are consistent with clean crisp edges. If there are any defects in your scaling texture rubbing will only accent the mistake.
- Apply washes or airbrush transparent paints over each tipping application to soften and give your tipping a natural look.
- Never use the same intensity paint through out the scale tipping and scale tip multiple times as necessary to get the right look.
- Using a hand brush to apply scale tipping will give you scale tipping that is more vivid and has the most contrast but is not the easiest to do. Jeff admits that fingertip applications are his method of choice for commercial and or non-competition pieces.

## Cyril Smith - Cyril gives us his keys to scale tipping:

- The renderings of the scales are critical. The size and shape of the scale needs to be accurate and they need to look like they flow naturally.
- Think of an individual scale as a miniature mirror on the fish.
- Cyril scale-tips by applying Treasure Gold wax in both Gold and Silver colors. Over these applications he applies transparent to lightly opaque washes with a water base so that the colors flow down into the areas around the raised parts of the scales.
- He starts with base colors only, and then does gold tipping; then he begins to apply colors with airbrush. He continues to gold scale-tip with a #5/0 brush.

- He uses first quality paints; his personal choices are Jo Sonja's Powders; Wildlife colors and Polytranspar (lacquers) airbrush ready paints and Treasure Gold wax.
- Waxes are good for scale tipping because with opals and shimmers, you tend to get harsh lines. He does not shy away from using them; he just knows that when applying the opals and shimmer and metallic colors he needs to "wash" them to blend them in. They give depth and with 'softened' edges they really make the scale tipping realistic.
- He uses a finger application for fiberglass reproductions and commercial carvings.

Cyril also explained his award winning miniature process in some detail.

- When scales are knurled, burned or impressed he uses powder pigment exclusively for scale tipping. (He uses the waxes on the opercle and pre-opercle.) He uses different grits of powders. He starts with one application of fine powder followed with two more layers of medium and one of course powders.
- The entire fish in gold powders, which are "extremely lightly", brushed off. Leaving the impression of scale tipping when sealed in with gloss.
- He does not use his finger to rub the powders, because he is unable to avoid smearing the powder all across the fish. Use a brush to apply.
- He goes over spots and "fine tunes" the job, often several times to get the look just right. Until he is satisfied, it is never "good enough."

**Don Frank** - Don's first words regarding scale-tipping were: "Best tip – don't do it!"  
(We think he was kidding.)

- Get scales lined out at the proper angles, no matter what tools that are used to render scales, they must fall correctly. The color patterns on a Striped Bass or a Tiger fish have color markings that fall on each scale. Consequently if the scales are not laid out correctly then neither will the color patterns be correct for the fish.
- The tipping method that is used has to do with scales rendered. For example you can't do Arp's foil method on a wood carved fish, no uniformity. Additionally, you can't use finger waxes for same reason, so really the only method left is using paint.
- 17" Trout – just using the filbert paint it on, do it
- Artist brush of choice for Don is a #1 Round, he feels it is better than tiny brush
- Scale-tipping is easiest for me using Jo Sonja gold, silver due to quality of paint
- Don tips with the fish's back facing up for ease of access to the right angles.
- Regarding frequency once is good, twice is better, and 3-4 times is best. (He said something about an old girl friend, but we thought we should edit that part out.)
- Tip all scales, then spray transparent paint, re-scale tip a few for highlights by dropping brush sizes painting a smaller scale tip than before.
- Be creative

## EPILOG

Now you know some secrets used by world champions as far as scale tipping. We hope this article will be an inspiration to you. If there is a theme to the advice in this article it is 'Experiment... Follow your reference closely... do not hurry... use quality products... and perform the scale tipping multiple times for best results.

- Always refer to your photos, castings or specimens to determine; what to do; How to do it; and when you are done.
- Obtain and keep on hand a variety of scale tipping mediums. Be prepared to experiment with techniques and medium.
- Scale tipping is applied multiple times to create randomness in size, shape and intensities of colors
- Scale tipping is applied near the end of the painting process for tipping that is apparent and very visible. For more subtle tipping applications would be done early on.
- Scale tipping is toned down with light washes or airbrush applications to create a soft natural look.
- Use a small brush for hand painted tipping. Short bristles #1, #3, #4 in round or filbert.

Join the IWCA, NFCG, and/or get on line with the fishcarving2@yahoogroups.com to learn more about the fascinating topic of fish carving and painting. Keep the chips flying... we will be there for you when needed, and rooting for you to keep improving and impressing the judges! For some additional information please see the reference list that follows.

### Reference Guide

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Editors are:

Donna Mc Culloch  
Dale Barrett

Warren Young  
Ray Dodge

Andy Anderson  
Danny Patterson