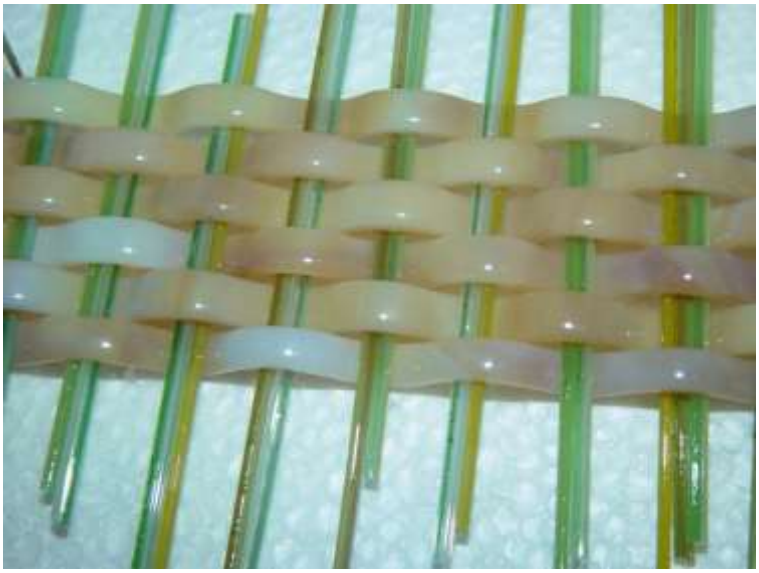
The Grand International Magless Event 2011/12

1 - **Brad Walker**

2 - **David Nutty**

I did a weave sample that really does not qualify as a magless since hanging it on your fridge is a bit risky … it exceeds the size suggestion a bit but as coordinator this year I took the liberty. It is a good example of my most recent work and covers a variety of glass techniques in order to create the weave. I use Bullseye glass in these samples. Feel free to email me with questions, Hopefully I can explain. If you want me to come teach you – send me an email – we'll work it out.



The following techniques are used in these weaves: casting, glass cutting, slumping, vitrigraph, tack fusing and possibly full fusing. I will provide a good overview but more details & pictures should be on my site www.davidnutty.com soon.

The basic process is cut glass into ¼ strips and slump them (separated by small gap) on a sine wave shaped mold to create 'wave strips'. You will also need rods, canes, or stringers to act as 'threads' of glass to weave into the wave strips. By offsetting the ridges and troughs of the waves we can lock the entire piece together during the weaving and then tack fuse the entire piece to solidify the weave.

Techniques to Create Glass Weaves

Mold Casting (or purchase):

There are molds out there to slump strips for weaving but I don't like the ones I've seen mainly due to the square wave profile of the mold. I feel this is meant for weaving strips with strips and gives a lattice feel (like apple pie crust) to the weave instead of a textile weave of wide strips and narrow threads. By making your own mold that is more sine wave shaped you have a more natural flow to the wave strips. My first mold that I created was made using a clay slab the size of my kiln shelf and then 'dragging' my fingers through them to create troughs in the clay. I then smoothed out the ridges to get as close a 'sine' wave as possible. I cast the clay in Castalot (or similar strong mold mix) for repeated uses. I have since made a profile rake that I can draw across the clay (or castalot mix) to create wave profile. I also have a stainless steel mold made for me. Once the mold is cast it can be used multiple times for creating wave strips.

Full Fusing (optional):
If you want to make your wave strips more unique now is the time to decorate the large piece of glass that you plan to cut into strips. You can add frit or stringers or ?? to fuse into the glass but don't make it so 'clunky' that it is hard to get a straight cut out of it. Also keep in mind this is a single layer of glass so full fuse as low a temp as possible in order to not buckle the glass or allow to pool up to 2 pcs thick.

Glass Cutting:
This is a pain if you don't have a Morton system or similar T-square jig that allows you to cut even width strips of glass. You are striving for ¼" strips of glass (or smaller). The main thing I have learned about cutting strips evenly and narrowly is to always have the same amount of glass on both sides of the running score to insure a straight and true running crack. In other words – never try to cut ¼" off the edge of a sheet of glass – instead cut off a larger (say 2") strip and then cut that in half to 1" – then cut that in half to ½" – then cut that in half to ¼". I have not been able to divide the ¼" strip into eights but you can break a 3/8" strip into 1/8" and ¼" if you are careful.

Slumping Wave Strips:
After cleaning your cut strips you can place them on a primered mold to slump them into strips. I leave a small gap (1/16"?) between the strips so they do not tack to each other during slumping. I go up to 1250 and soak for :30 to achieve my waves but you will have to test your kiln/mold for best results.

Vitrigraph Canes & Stringers:
You can purchase rods, canes or stringers to act as weave threads but I use a Vitrigraph kiln I created out of an older pottery kiln that I converted for v-graph. Last year at the MAKE magazine Makers Faire in the Bay Area I demonstrated the use of the vitrigraph and used a battery powered drill/screwdriver to hook the molten glass canes and created 'drill-o-cinos' of glass. Most of the twisties you see in my magless were created that way. I simply clip a metal binder clip onto the glass stream coming out of the v-graph kiln and hook it with a bent wire inserted in the drill – makes for nice even latticinos.

Assembly of Weave:
Once you have your wave strips slumped and canes & stringers available the main process of 'weaving' can begin. If you have all your strips lined up side by side (so all ridges and troughs are the same – one big sheet of sine waves) you can create offsets by flipping every other strip over in the same place. You can also creste offsets by sliding every other piece towards you by one 'wave'. The end result is that you have created a series of tunnels that you can now thread your rods through (Once you have 3 tunnels 'threaded' you begin to lock the weave together). I usually use bamboo skewers to weave the waves together and then slide out one skewer at a time and replace with glass stringers until all bamboo has been replaced. Then I 'wiggle and jiggle' the canes & stringers to see if I can stuff anymore threads into the tunnel.

The size of your weave piece is only limited by the size of your kiln. You can weave your piece as long and as wide as you want by offsetting and interlocking strands of wave strips. My wave strips are only 7" long but can be interlocked to form a ribbon of glass. My last piece was 40" by 10" but all wave strips & stringers were less than 7".

Tack Fusing:
Now that you have a completed piece woven together the trick is to get them to the kiln. I prefer to build them on thinfire paper and heavy cardboard that I can 'slide' onto the kiln shelf (just the thinfire sheet, no cardboard). I tack fuse the piece at 1225 for 1:00 to get a good tack but not lose my slump form (since you are tacking on flat kiln surface). Again, experiment with temp/time.

Slumping Entire piece:
Don't know – all my pieces have been mounted flat.

I hope that is enough overview to enlighten you to the process. Each step of process is a lesson in itself so check my website out to see if I have elaborated on these steps in more detail … or contact me for more info … thanks mag'rs, David Nutty.

3 - **Rosanna Gusler**

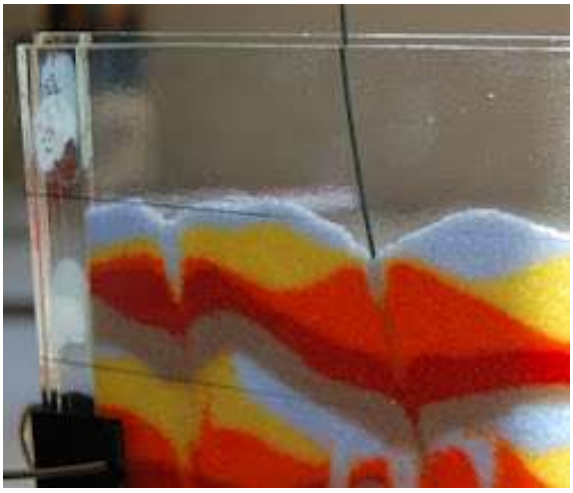
- cut up bottles.
- make stars using lots of glue.
- spray with borax.
- fire.
- add ferro gold with kemper pen.
- fire again.

4 - **Dana Worley**

(more pictures can be found at http://jestersbaubles.blogspot.com/)
When thinking about what to create for the exchange, I had three goals in mind. I wanted to try a new technique, I wanted an opportunity to use an Inland Swaptop hobby saw I recently purchased, and I wanted to create something that was representative of Utah. I decided to create my maglesses using a technique that I've been calling a "frit sandwich", incorporating the colors of the Utah desert landscape. My idea was to create a slab and cut it into appropriately-sized pieces for the maglesses. The frit sandwich (or sand painting with frit) is by no means a new technique -- you can find instructions by various people on-line -- but it is a technique that allowed me to accomplish my three goals.
I decided to create two slabs so that I could test the technique and firing schedule with the first slab and adjust as necessary. I also knew a smaller slab would be easier to cut. I started with a 12" square piece of clear Spectrum System 96 glass and cut it in half. I then cut four narrow strips of clear (approx. 1/4"). Three narrow clear strips were glued along three edges of one of the 6x12" pieces with Elmers glue and then topped with the other 6x12" piece. It was all held in place along the three glued edges with binder clips and allowed to dry. The binder clips came in handy -- not only did they keep the glass sandwich securely together, but they also provided a nice way to stand the glass on edge when I was ready to fill it with frit.

Binder clips hold the glass securely and act as a stand

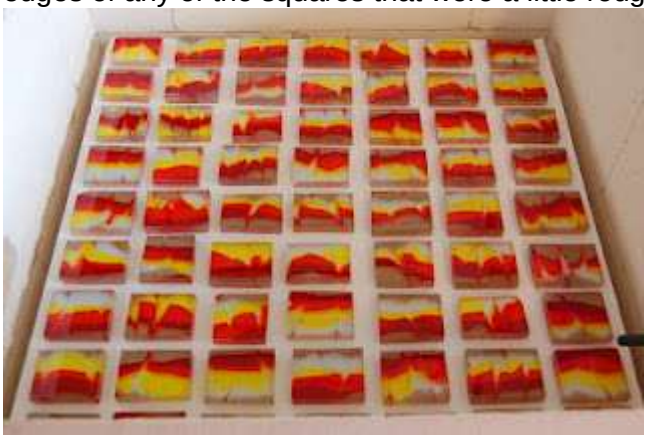
I drew lines approximately 1.25" apart horizontally on the glass sandwich with a marker to indicate the height of each cab. In keeping with the desert landscape theme, I choose Uroboros System 96 fine frits in Bronze, Cherry Red, Orange, Yellow, and Sapphire. (In hindsight, the Sapphire was more subtle than I had in mind -- I was hoping for a "bluer blue".)
I spooned frit onto a piece of card stock folded in half to act as a funnel for pouring the layers of frit into the glass. After I poured a layer of each of the colors, I used a piece of floral wire to manipulate the frit. I did this layer by layer until the sandwich was filled. I then capped it off with the remaining piece of narrow clear glued in place and allowed to dry.



Using floral wire to manipulate the glass

I used a fairly standard full fuse firing schedule for the slab (in degrees F):
500/hr to 1100; hold for 30
250/hr to 1425; hold “until done” (approx. 20)
AFAP to 950; hold for 45
Cool down

Note that my kiln heats/cools conservatively (especially cooling). This schedule works well for most two-layer pieces I do. You may need to adjust.
Once fired, I used a ruler and 90 degree angle to mark horizontal and vertical lines on the slab with a permanent marker, to represent the approx 1.25 x 1.5" squares (give or take ;)). I smeared the lines with Vaseline to keep them from washing off while sawing. I then went to work sawing the squares. Once I had successfully sawed all the squares on the first slab, I repeated the process for a second slab.
Often as the cut got near the final edge of a square, it would shear off. I used a grinder to clean up the edges of any of the squares that were a little rough.



To finish up the squares I placed them in the kiln on a piece of Bullseye Thinfire and fire polished. The schedule was:
400/hr to 1100; hold 30
800/hr to 1440, no hold
AFAP (venting to about 1150) to 950, hold 45
Cool down

Cut and in the kiln, ready for fire polish

I love the look of the frit fired between the layers of the glass. I did get weary of sawing up those little squares, but the second slab went quicker than the first, and it did provide the practice I was seeking. I'm looking forward to using this technique for other pieces, and I hope that my magless experience might inspire someone else who's never tried the technique to give it a whirl!

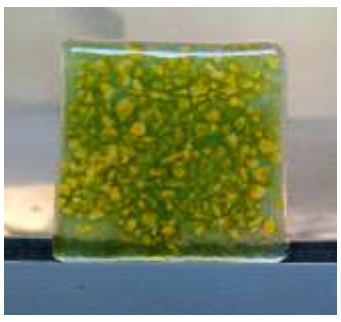
5 - **Cindy Hoonhout**

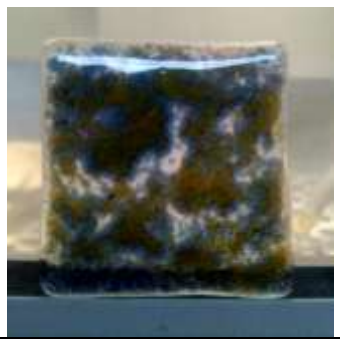
6 - **Nancy Barry**

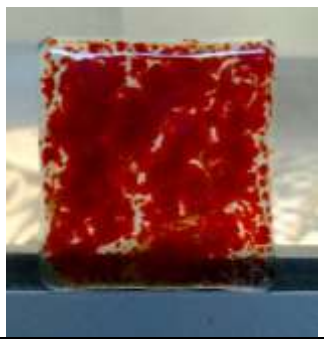
SPECTRUM 96 clear base glass, satin finish
assorted Spectrum medium size frits and powders: navy, marigold, cherry red, med gold

Spray the clear tile with Hairspry, sprinkle with med. frit, over sprinkle with the powder.
Placed on thin-fire, full fuse or fuse to just past tack stage for more definition.
Frit is on top of the tile: edge clean-up may be necessary.

I think this technique will work better on a larger scale...Some of the magless made for the exchange worked well; some could be redone at a lower temp for better results..







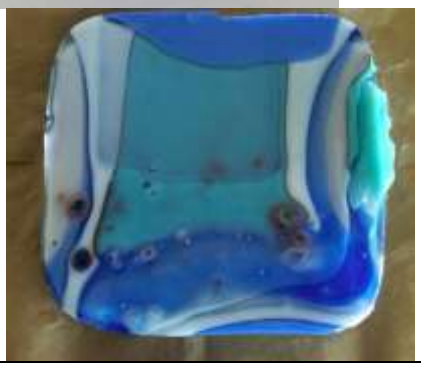
7 - **Heidi Vander Werff**

8 - **David Wingo**

9 - **Audrey Love**

1. Sheet of glass with another piece of colorful glass on top.
2. Make twisties by taking ¼" strips of glass melting and twisting them together over a torch.
3. Break up twisties and place on the 2 sheets of glass; full fuse.
4. Make dots by breaking up small pieces of glass/twisties; full fuse.
5. Saw up the sheets into 1" pieces.
6. Put a dot on each, kiln polish.

10 - **Risa Prince**



I've been intrigued by the concept of demonstrating the fluidity of glass in my work. I think it is harder to do with fused glass than blown glass. I took a class called The Flow (offered at Bullseye, my home glass school and several other studios) and tried that technique. For my convenience I exclusively use Bullseye glass. This design was inspired by my mother's recent move beachside in Florida and my nieces' sea glass collection.

Bullseye sheet glass stacked and fully fused on a slant to get glass to move. This piece ended up 7" x 7" x 1 to 1.5" thick.

Then it gets cut into approximately ¾”cubes and lightly polished to minimize blade marks. The more cubic the piece, the rounder the final magless.

Back into the kiln and fully fired….first batch were held for 20 minutes at 1475 to get them to flatten out but they were still thicker than I expected. I then tested 40 and 60 minutes which were thinner but still were about 1/3” thick. I’ll try 90 minutes next time to try to get them to spread more and be closer to ¼”. Just like baking cookies!

I finished by sandblasting to get rid of remaining surface marks and then fire polishing to soften a little like found sea glass. My spouse is a photographer and took this back lit macro shot. I really like how the reactive line fades through the depth of the piece and looks like a wispy shadow.

11 **Lynn Golden – California**

Some time ago, I made a series of heart-shaped charms, just experimenting with scrap glass. One of them turned out to look like copper on pink, which is a favorite color combination. Since I had a heart attack last fall, I decided it would be appropriate to make a heart-shaped magless, and decided to try to reproduce the pink and copper heart. I thought I had used silver leaf as an inclusion, so I hunted out the remains of the package. That was the easy part. I ran into a bit of a snag when I discovered that apparently Bullseye no longer makes the raspberry pink opal that I had used for the base. The only possibility I could find was 301, which looks like a lavender-blue glass and strikes to pink. So I ordered some of that and started experimenting.
It changed to a suitable pink, but I was not able to get the same effect with the silver leaf. The original piece had looked like it had large flakes of metal under the clear cap; the effect with the new glass was quite different. But I realized it had as more organic look, which, I thought, looked more “anatomical”. I also found the “silver stain” effect quite interesting.

I cut out 1”x1” squares of the pink for the base, tore off bits of silver leaf and kind of scrunched them on the base, and then added a clear cap. These were fired to a full fuse. I then made a small paper heart pattern, and drew the shape on the back. I used mosaic nippers to chop off the excess glass, and finished the shaping on my grinder with the 3/4” and 1/4” bits. It took about 5 minutes per piece to get the heart shape. They were fire-polished.

12 **- Terry Arter**

13 - **Peggy Mattock**

My mags are just pieces of sheets made of Bullseye frit – mostly powders used in liquid form with water and cmc – plus some Glassline paints within the layers or on top. I had intended to grind the edges to neat bevels but my recirculating pump exploded at just the wrong time – so the pieces are simply fire-polished.

Lessons learned

- It would have been cheaper to use sheet glass and powder just on the top surface
- It takes forever to grind flat layers away on a disc grinder
- Powders devitrify if you fire them too often
- Equipment breaks down when you most need it!

14 - **Nancy Lappenbusch**

Hi! My how-to is super easy. Freeze and Fuse. It seems like every magneteer has to try a freeze and fuse at least one year. The recipe is as follows:

White BE powder and enough bottled water to cover it in a plastic cup. Wear a mask, of course. Spoon the sludge into an ice cube tray from Target that was in the Halloween section.

Dab the top with paper towel, tap entire tray against table to get the water to rise, dab again. Then dab, tap, dab, tap, until the water is just about gone. Freeze for about 90 minutes.

Pop out unto kiln shelf, and decorate the eye sockets with fine frit and little eyeballs that were made earlier. (See BE website on how to make the frit ball bowl.)

Fire up to 1320 with an hour hold. They shrunk about 25%.

This is why I am annoyed with about half of the skulls: the Target flexible ice cube tray had some kind of oily residue on the silicone. I washed and washed, used white vinegar, and used a toothbrush, but it often left a black stain on the teeth of the skulls. My kid said that skulls naturally have rotten teeth, but it was not the look I was going for. I filed them down and refired, but I could never fully get rid of the black. If you ever make skulls from a Target tray try a powder that is not white.

15 - **Jan Barker**
"Saturday Frogs"

I usually have small quantities of powder mix left over when I work on my frozen casting projects and one day I decided to play around with color mixes. The frogs seemed to be the perfect test subjects and once I started, it was really hard to stop!
Tech stuff – 100% Bullseye Glass – two fusings – one for forming, second for tack fusing.
BTW – the house parrots gave their ok for the decidedly non-avian submission this year, they were getting bored with my choices anyway ☺

Picture #1 shows a kiln full of frogs, some leaf bases and a couple of alligators

Picture #2 is an overhead of the batch before they were boxed up for shipment – can you find the one that made it to your house?

16 - **Doug Randall**

17 - **Jennifer Polver**

Materials:

Glass - Bullseye Charcoal Gray Powder, White Opalescent Powder, Clear Sheet Glass and Charcoal Sheet Glass. Boxes for Molds - Rigid Foam Insulation Boards (found at Lowes or Home Depot). Cut to size and hot glued together. Clay is put in the seams to stop leakage

Begin with the model of the Stegosaurus

Create Single Stegosaurus Mold. For this mold I used Oomoo 30 (a smooth-on product).

To create multiples to make a bigger mold I used Van Aiken Plastalina Clay (an oil base modeling compound that is sulfur free and melts beautifully).

I melted it in a toaster oven, poured it into the single mold and let it cool

Once cool I removed it from the mold and with a clay tool cut off the excess clay.

I repeated this process until I had 18 dinosaurs.

I used Mold Star 30 (a smooth-on product) to pour my mold. The only reason I switched is I ran out of Oomoo.

To create the Glass Clay Stegosaurus - Using a respirator mix the Steider Studios Glass Medium™ with the Frit Powder following the instructions provided here http://steiderstudios.wordpress.com/2010/05/28/glass-clay-a-step-by-step-tutorial-using-steider-studios-glass-medium//. I used equal parts white and charcoal powder.
Once the powder is the consistency of cookie dough push it into the mold.
Freeze for an hour

Allow to dry 24 hours on a paper towel
Turnover and wait until the clay is completely dried
Normally I would sand any rough edges with a fingernail file, but they turned out to be extremely fragile so I used a clay tool to gently knock away as much of the excess clay as possible (Use a respirator)

Cut equal number of 2” x 2” clear and charcoal squares. Full fuse them
My Schedule:

600 to 1050
50 to 1250
250 to 1450 hold 60 minutes
800 to 900 hold 45 minutes
100 to 700 off

Place the glass clay dinosaur on the charcoal blank and fire.
My Schedule:

300 to 1350 hold 60 minutes
800 to 900 hold 2 hours
100 to 700 off

First batch of 16 was cartoonish so I lowered my hold on batch 2 to 30 minutes. They were still cartoonish so batch 3 I lowered to 15 minutes and batch 4 I lowered to 10 minutes.

End result (batch 4).

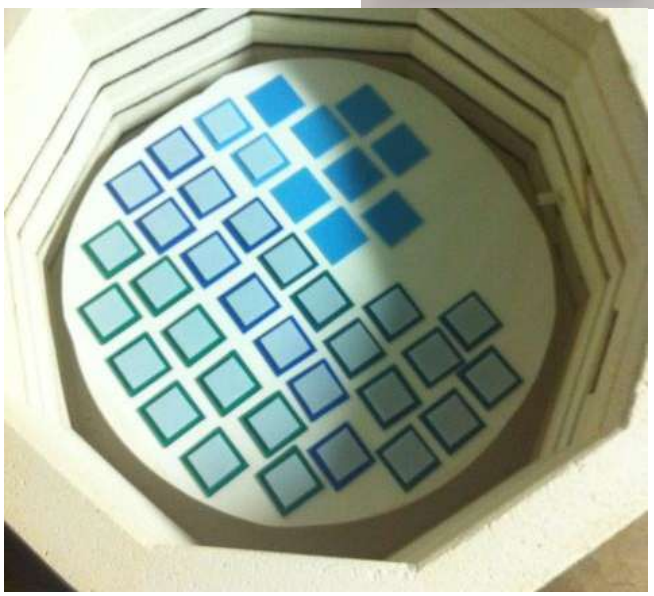
18 - **Barb Ridgley**

I decided to play with powders and pattern bars this year for my magless. I made a lot of dots in 5 different colors by full fusing ¼" squares of glass. I then sorted out the colors and arranged one color of dots on the kiln shelf. I covered these with powder frit of a different color, capped with a piece of clear and full fused. I did this 5 times creating 5 different color combinations. Next, the blanks of glass were sliced into 3/8" strips using a diamond blade on my tile saw. The strips were arranged with the cut side up, side by side and full fused. The fused piece was then cut on my tile saw into small rectangles. I put them back in the kiln to fire polish.

What I learned: I didn't expect the glass on the top of the second fuse to move very much, as I had dams, but was surprised to see some movement and some of the dots aren't real rounded. If I did this again, I would flip/fire them –as the dots that were against the kiln shelf did not move.

19 - **Elisa Marchand**

This being my first Magless Exchange, I wanted to keep things simple!
I decided to go the reactive route!



I cut 2" squares of Bullseye copper bearing glass to use as the base of my Maglesses . The base of your Magless is either:

0164 - 2mm Egyptian Blue
0216 - 2mm Light Cyan
0144 - 2mm Teal Green
or
1417 - 3mm Emerald Green

Each 2" square was then topped with a 1 1/2" square of Bullseye 1009 - 3mm Reactive Cloud.

For the next step, I sprinkled each Magless with Bullseye frit, again, a copper bearing color. I DID NOT MIX the frit on any of the Maglesses. Each piece was sprinkled with only one color of frit and the color of the frit for each Magless was chosen randomly. I did use different sizes of frit.

The frit on your Magless is one of :
0116 Turquoise Blue - Coarse
0144 Teal Green - Fine
0145 Jade Green - Fine
0146 Steel Blue - Fine
1145 Kelly Green - Medium
or
1417 Emerald Green - Medium

The final addition to each Magless was a pinch of Bullseye 1009 Reactive Ice - Fine Frit.
The pieces were assembled in my kiln on a shelf covered with a sheet of Bullseye Thinfire and were then taken to a full fuse.

I hope you enjoy your Magless!! I enjoyed making them!! Do you know which colors were used to make your Magless??

20 - **Barbara Cashman**

I made this tile about 15 years ago. Of course, I couldn't find the original materials. However, I remember this much. I purchased the unglazed paver tiles (there were 2 different kinds in my Magless) at Home Depot, cut them down to squares and bars. Added a glass bridge (I don't even remember what it was), sprinkled crushed adventurine (goldstone) and capped with clear glass. Of course, it crazed, but I liked the look. Hope you did too.

21 - **Zane Rozkalns**

This year, I decided to concentrate on cutting small circles with my lens cutter (Easy-Cut). Each magless was made of 2 circles of either white or clear or gray transparent glass. By the end of 120+ circles, I was doing rather well, although not as perfectly as I would have wished. I did not grind any edges though. On top the two layers I scattered frit, added dual colored rods (nipped into tiny bits for centers), or various bits of colored glass for centers. Then I arranged roughly same sized chips of glass for petals to make glass flowers. I even made a few flowers with mica mixed with rubbing alcohol painted between the 2 layers.

My small kiln's controls are numbered from 1 to 5. I fired for 1 1/2 hours on 2 then on 4 until done. The temperature after 1 1/2 hours on 2 would be around 800 degrees Fahrenheit. After setting the control on 4, it took anywhere from 1 hour 10 minutes to 2 hours until I liked the way the flowers looked.... I could only fire 9 flowers at any one time. Because it took several firings, I could fine tune the way I wanted the glass to fuse...at least to some degree....

22 withdrawn

23 withdrawn

24 - **Andrea Raeburn**

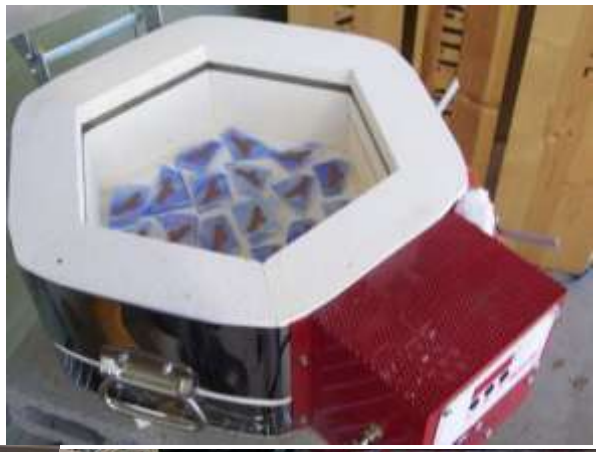
25 - **Beth Genung**

Come up with what seems like a cool idea.
Procrastinate.
Try to make cool idea; discover that it is not capable of quick, mass production.
Come up with another idea that is doable.
Procrastinate until it is too late to make second idea.
Come up with a third idea.
Decide that third idea is more fiddly than you want at the last minute.
Come up with a fourth idea.
Cut Tekta into 2" squares.
Take a piece of aluminum foil and a paper punch. Carefully punch shapes from foil, dumping them into a homemade pottery bowl with an unfortunate glazing choice.
Procrastinate another day due to a fabulous thunderstorm, because you know that if you run the kiln, the power will go out. Of course, since you decided to procrastinate, the power stays on.
Place foil shape between two squares of Tekta.
Fuse.

26 - **Carole Smith**

27 - **Diane Rice**

Silkscreened Fusemasters enamels on Bullseye glass, 2 layer fuse (enamel up on some) 500 degrees per hour to 1480 and Hold for ten minutes



28 - **Larry & Barb Larson**

29 - **Ross Wirth**

Each year, I have tried to use the magless “experience” as an opportunity to try a new technique and run a series of tests. This year I decided to play with the Red Reactive (96 COE) glass I bought in Las Vegas last year.

In the picture above, the magless on the left used the Red Reactive Opal frit so the reactive surface is only seen on the edges (and unseen underneath). The center and right maglesses used transparent Red Reactive glass, so the reactive surface can be seen beneath the red reactive glass. The left and center would be classified as a “strong” reactions and the one on the right “medium.”

Over course of the different kiln runs, I used different color powers & fine frit and varied the amount of powder to also see the differences. The center magless has enough extra blue power to show in the finished magless while the outer two magless used less power that was sufficient to induce the reaction, but not enough to be clearly seen as the powder color blends into the white base.

The magless base is 1.25” x 1.25” white 96 COE, fine or powder frit, reactive glass, and capped with clear.

Learning:

- Fine frit and some frit I made provided contrasting colors. Powder frit was only seen if a large amount was used, but still produced a reaction. Single points of fine frit can be seen as individual dots.
- Not all reactions matched what Uroboros Glass has in their reaction chart for the opal reactive glass. (Transparent reactions match the chart in all cases tested.)
  I would classify the differences I observed as:

Color	Uroboros Reaction Chart	My results
Light Blue	Mild	None
Dark Blue	Mild	None
Dark Green Opal	Medium	Mild
Turquoise Blue Opal	Strong	Medium
Sky Blue	Medium	None

Full fuse – 2+ layers, no bubble squeeze

Segment	Rate °F/hr	Temp °F	Hold min	comment
1	400	1000	10	
2	1000	1465	5	
3	AFAP	1100	0	Not flash cooled – this segment is a hold-over from my normal program
4	AFAP	1000	8	
5	300	960	10	
6	150	800	0	
7	400	120	0	400 is AFAP for my kiln below 800

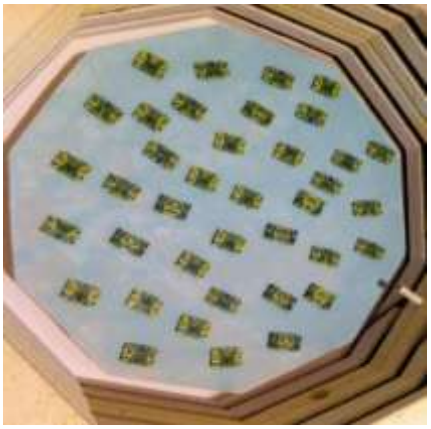
30 - **Charles Hall**

I got the idea for this when I came across an old sheet of Wasser silver glass. I made a wooden tray, then a silicone negative off of the wood. The idea was that I could make a bunch of plaster mini slump molds, didn't work that way. I had to use a bottom slump mold, and a top weight before the glass would drop down to form the needed compartments. After a number of failures, I settled on thinfire shelf paper between the pieces to fix the problem of the glass sticking to the molds. I found that I could make the top and bottom slump molds by pouring strengthened investment directly onto the silicone molds, then popping them out, eliminating the need for a lost wax step. The turkey and gravy were lost wax, frit and powder mixed with Glastac, and treated like Pate de verre. Since the Wasser glass couldn't be used at temps. high enough to fuse with the Bullseye frits, I made all the side dishes out of misc. stuff, mixed with epoxy, sort of Pate de Epoxy. A fun mag to make, would change some things if I made it again, but that's not going to happen.

31 **- JJ Jacobs**

32 **- Sharon Furubotten**

33 **- Lyn Love (formerly Lowry)**



My pattern bars are a take on large pattern bars but on a much smaller scale. I prepared my primed kiln shelf with three dammed areas of 1-inch x 12-inch x 1-inch tall. The dammed areas were lined with strips of fiber paper. After choosing my colors, I cut long narrow strips of glass and stacked them within the dammed spaces and tried to duplicate the patterns within each space. I carefully placed the shelf into the kiln and fired to a full fuse with a long soak. After the bars had cooled, I took them out to the tile saw and cut the bars into 1/4 inch slices. After washing the slices, two of these slices were laid on top of a piece of 1-inch x 2-inch glass and then refired to a full fuse.
Wha La! Mini Pattern Bar Maglesses!

34 **- KaCe Whitacre**

This is my first exchange. When the BE catalog came the pieces made with the chemical reaction of sulphur-bearing powder to create a rocks-in-a-streambed effect intrigued me. So I thought it would be fun to create small inclusions of this process in glass for the exchange.
An outline of the process can be found at www.bullseyeglass.com/methods-ideas/river-rock-reaction.html
I live in Washington State. Here we have lots of alluvial deposits and this technique reminds me of our countryside. I hope it invokes fond memories for you as well.
This project has helped me conquer the 'fear state' of beginning a project in expensive glass. I hope next time to do something more indicative of the work I will be developing.

35 - **Marty Kremer**

Bullseye sheet and cane, fused, cut , re-fused and re-cut a couple of times.

36 withdrawn

37 - **Susan McGarry**

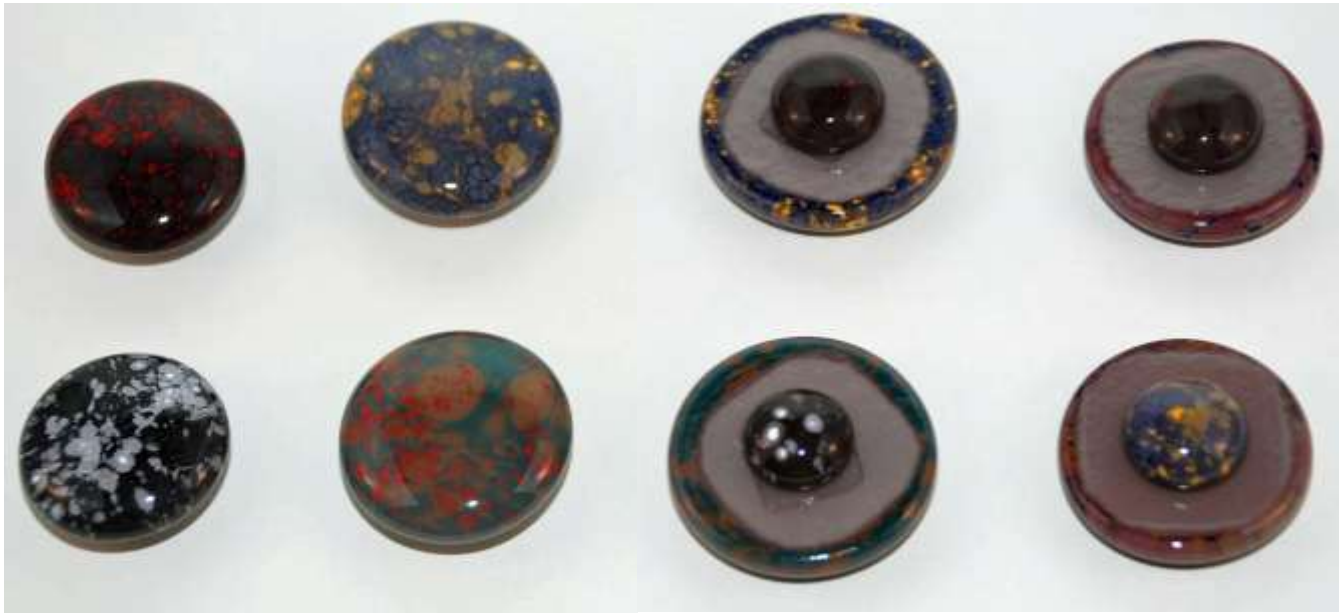
38 **- Dianne Van de Carr**

I started by carving a heart into cone 10 B-Mix clay and then pressed an octopus positive (button)into the heart. The molds were bisque fired and then coated with many thin coats of primo primer. After they dried, I used a very tiny spoon to spread powder into the octopus impression. The mold was then filled with 1101-003 frit and a sprinkling of colored powdered frit. The last batch was with Bullseye 1416-008 (light turquoise), a light sprinkling of 1009-008 (reactive Ice) and a final layer of 1101-003 Clear. I like faint pink outline around then tentacles.



39 **Lynn Perry**

These cabs are made by applying multiple enamel colors to glass and fully fusing to round.



To make the magless dynamic rather than static, I glued a smaller cab to the bottom of the larger cab. The tricky part was to position the smaller cab directly underneath the center of gravity of the larger one so the finished piece balanced perfectly. These pieces both rock and spin and always remain balanced on the point.

40 **Zoe Topsfield**

Glass: Bullseye. Fuse a baseplate sort of landscape looking with whatever scrap is lying around, my original baseplates were approx 10" x 3". Cut fused plate into smaller useable pieces. Draw trees using liquid black stringer (I used Glassline black and applied it using an Airpen). I fired those pieces at 1250 because the black looks better if it has a prefire, less bubbling. Next I capped each mag with a piece of clear on which I drew with fine gold paint to outline some areas. The whole piece was then fired at 1480 for 5 minutes.

41 withdrawn

42 withdrawn

43 **Joi Lakes**

44 **Kevin Midgley**

One of my Tofino beach sand theme pieces. I found the inclusions and never having used them before experimented with creating different patterns and how they interacted with the surrounding glass, proximity to edges etc. Tough to place them carefully and not have them move.
Just figuring out how to handle the inclusions was difficult. There is always something to learn from each firing and I will continue to vary my assembly techniques.
Some worked better than others. It is a process of working through all the variables.
I have no idea why there are colour variations in some of the inclusions other than to suspect different exposure to air etc.
I was going to turn them into pendants for everyone but then decided I'd better not change from the magless theme. They are all designed with the possibility of hole drilling for conversion into pendants in mind. Turn them into pendants and save a magnet. I'm going to do that with all the extras I made. Oh and also I learned to watch out for the amount of glue and where it was placed. Some have unnecessary bubbles as shown in photo.

Obviously an artist copyright design, may the plague of whatever curse you fear the most haunt your life forever if you even think of copying it.

45 withdrawn

46 **Sam Cagle**

47 **Laima Rozkalns**

Inspired by this link (http://fusedglass.org/book/export/html/936), my mother (#21 this year), and a desire to use up some not very attractive glass I'd somehow accumulated ... I ended up with funky fish!

SUMMARY:

Phase 1: Make striped ovals to use as fish bodies.
Phase 2: Assemble ovals plus other fish details and fire into fish!

DETAILS:

1. Roughly following the instructions at http://fusedglass.org/book/export/html/936, I created large (about 4" square) 7-layer stacks of glass and full-fused them together. I put my kiln on high and kept going until we hit full fuse at 1500. In my kiln this takes about 80 minutes, after which I turned off the kiln to let it cool without special attention to annealing. Do take care and put a little thought into the arrangement of your glass, as 7 layers of glass obviously spread out some when brought to a full fuse, *and* I had one incident where i used glass in a way that ended up with bubbles that caused some interesting movement all across the shelf.... at which point I realized that inserting a bubble squeeze step in here is not a bad idea.

2. After the 7-layer piece cooled, I used tile nippers to break off arbitrarily sized, but fairly long and skinny, pieces and arranged them on the kiln shelf. (See picture 01.)

3. I fired these pieces to full fuse (1500) again, in order to get the broken pieces to form ovals. (See picture 02.)

4. Then I took the ovals and arranged them with other small pieces of glass into fish-like shapes. This was usually a tail plus top and bottom fin that went under the striped oval cab, followed by some additional details on the fins and tail to keep each fish interesting. The last piece to go on was the eyeball, which was hairsprayed into place so I could move the shelf into the kiln without losing any personalities. (See picture 03.)

5. I fired the actual fish much more slowly than the 7-layer pieces above. I took approximately 120 minutes to get them to around 1000, then 30 minutes to get them to 1450/1500, followed by a long slow descent with a pause through the annealing range (which in my kiln took between 120 - 180 minutes to get them under 900 degrees), after which I turned off the kiln and let it cool itself the rest of the way.

6. End result? Many striped fish!

48 **Lynn Holman**

I've been experimenting with pattern bars (2 firings under my belt), so I decided to make a few in a design that I might use for a larger plate. I decided to try a couple of frit bars (2 color – opaque and transparent from frit I made) as well as a random pattern bar (technique learned from Brock Craig).

My first round of pattern bars were 2 ½" wide – this is because these were the narrowest dams I had (actually, I could have made some 1 ½"wide had I thought about using the width in advance). After a little coldworking, I combined those bars with layered sheet glass into a new pattern bar. I did this in two steps to create a nice clean line between the layered sheet glass and the bars, which I fired again.

The final bars were ground, cut with a tile saw and coated with devitrification spray before being fire polished.

Before firing

After firing

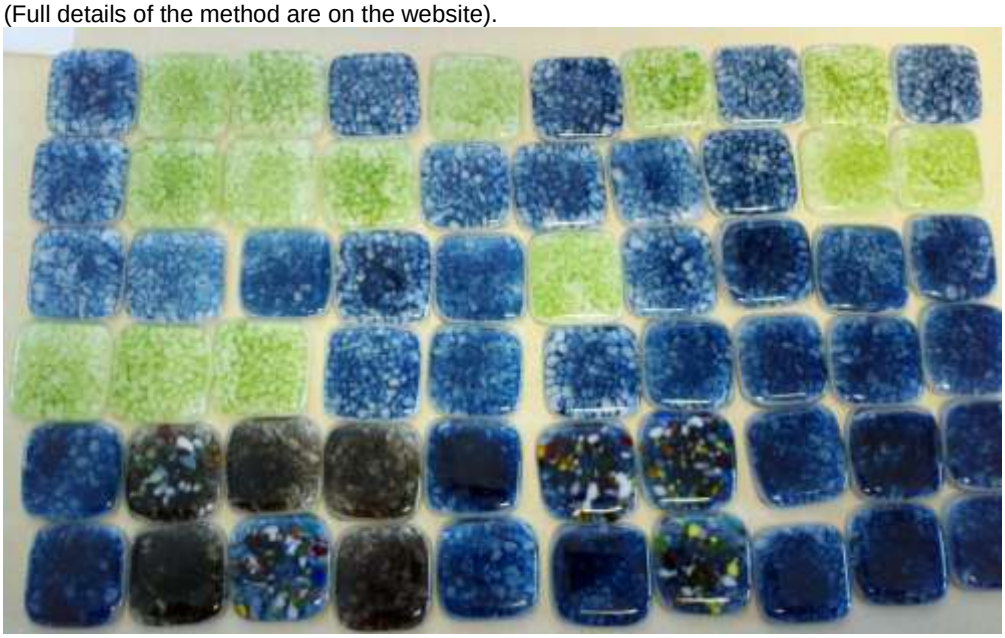
What I learned:

- Large pieces of frit condensed down more than I expected – I knew this but didn't think about it as I was limited to the amount of frit I had. Fortunately, this wasn't an issue as I had already planned to combine it with sheet glass.
- It's best to plan the size of the pattern bars ahead of time so that you have the right sized dams. At the time I cut up my kiln shelves, I had not planned on making narrow pattern bars (i.e. wasn't planning on making maglesses), so I had to get creative with using the dams to make everything fit as the final bars were less than 2 ½" wide but not 1 ½" wide.
- I misjudged how many pieces I would have once I cut up the pattern bars. The blade ate up more glass than I anticipated.
- The devitrification spray did not work as well as I hoped – I should have sprayed a heavier coat and took the time to swab the sides (easier to do with one large plate than 64 maglesses). Originally, I planned to sandblast them, which I should have done but was feeling a little rushed to finish them and opted for the "quicker" route rather than drive to the city to use the sandblaster.
- Do not commit to two glass projects due within 5 days of each other!

49 **Jolene Juhl**

My daughter and I worked together on this project. We got this idea from:-
http://www.jewelry-making-how-to.com/glass-frit-powder.html#axzz1pl5g1pzx

We tried a couple of other ideas before deciding this was a fun idea. We did a few with color frit and different colors of glass on the bottom.
(Full details of the method are on the website).



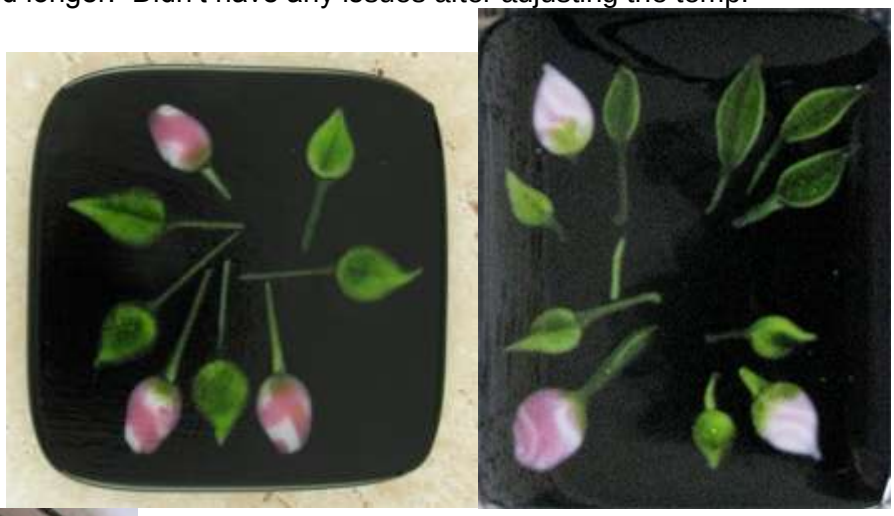
50 **Melodie Triche**

I've wanted to try full fusing my torch work into a base for a few years so I decided to give it a try with this exchange. I thought it might make a nice background to the torchwork I normally tack fuse on top. Here is how I created this mag. I hesitate to give temps only because it varies from kiln to kiln. I always do test pieces and adjust from there.

1. First I tack fused two layers of Bullseye soft black together. This first step may have been unnecessary but I didn't want to take the chance that the top layer may have slipped during the full fuse stage. I wasn't sure if the torchwork (fused on the bottom the first time around) would throw the glass off level, better to be safe than sorry. :o) I used soft black because I wanted a base glass that would get softer faster than the torchworked elements. I wanted the torch work to sink in the base instead of spreading out flat.

2. I created the background elements as flat as possible. I glued the elements onto the base glass. I use plain old super glue, but that's just my preference. This picture shows the torched elements just thrown on the base, they haven't been arranged yet. These were then full fused with the torchwork facing down on the shelf. The black base surrounded the torched elements with very little spreading as I had hoped. I was working in my small kiln at this point and went to 1475F for the full fuse. One of my test pieces I had taken to 1500F but the kiln wash stuck to the torchwork so I went lower and longer. Didn't have any issues after adjusting the temp.

3. After a thorough cleaning I flipped and fire polished the bases. This picture is of a test piece, I was trying different sizes and shapes.



4. I glued the rose and leaf onto the bases and tack fused, Depending on which kiln I am using this light tack can range from 1175F (big kiln) to 1225F (small kiln).
This is a pic of about half in the kiln ready to come out. I thought they looked pretty. :o)

I wish I had started a week earlier, I had to leave off a couple different elements that would have been an awesome addition to my mag and really elevated them to the next level. Maybe next year. I hope you enjoy my 2012 magless as much as I'm going to enjoy the ones I get in return.

51 **Laura Johnson**

First I hand cut aspen shaped leaves from Bullseye tekta using mosaic cutters, then I used glass line to draw the veins.

Next I sifted various sizes of opals and transparents over the leaves and fired them to 1400.



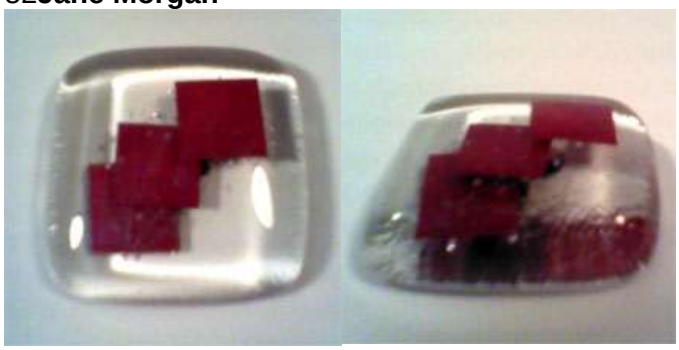
Next I used streaky opals cut into ¼“ strips then into 2” long and put on edge to create framed boxes. Using fiber paper I created a separation between the 2 inch boxes. I put a leaf inside each box face down and layered different colors of crushed recycled Bullseye (mostly iridized which gives them a sparkle). Fired to 1500.




I cold worked the edges using a wet belt sander and sand blasted the shelf side of the magless, then fired them a second time to 1420 with etched side up.


Thanks to all the glass instructors who have inspired me!

52**Jane Morgan**



I attempted a number of rather tricky pieces and none of them turned out as I had imagined nor were they worth showing anyone! For the magless you received, I used System 96 clear and tacky (sticky, not horrible ;-)) copper sheets cut into 3/8 inch squares. I adhered the small copper squares to three pieces of 1" square glass in such a manner that in no two pieces would the copper completely cover the copper below it. I stacked the glass/copper and capped with another piece of glass. I then fused to somewhere between a tack fuse and a full fuse to retain some height and obtain some depth. I hope you like them.

53 **Kate Saunders**

I made tiny frames with eight pieces of glass with four pieces on the bottom and four on top and full fused them.

After the first firing, for some of the pieces I glued overlaid small strips of glass to the frame, sometimes including dichroic glass or clear frit. Some of the frames only have large frit on them. I fused the frames again just up to tack fusing, 1350 degrees. I attached mirrors to the back of the frames with GE Silicone

2. My final step was to glue a piece of glass onto the back of the mirror. I made all of the maglesses with scrap glass and scrap mirrors, except for the frit.

54 - **Lynne Chappell**

The theme of these maglesses is “Ebb Tide”, a walk along the ocean tide line. My daughter, Tamara Garland, used this theme for a bowl and I thought it was delightful. The glass is Bullseye, various colors. The frit balls were fired to 1480F, made mostly from coarse frit, but some from hand smashed glass or nipped rods. The seaweed is made from shards.
Suzanne Basnett and I made these by heating chunks of glass, various colors, in the kiln to about 1250 where it is sticky enough to pick up on the blowpipe. We picked up enamels, frits and powders on the ball of glass, heated it in the glory hole and blew out a nice big ball of glass which I then broke up. Suzanne also made some in the torch. The blue-green ones were made with white glass, white enamel, copper and silver foil.
The shells were made with the freeze and fuse method. These were small mussel shells. I made molds with GelFlex, used several colors of powders. I used White, Marzipan, or French Vanilla with contrast colors (some transparents like Rhubarb and Burnt Scarlet) rubbed sparingly into the shell texture. They were fired to 1325F. The shards, frit balls and pieces of coloured glass were tack fused at 1375F, and then the shells were added and fired to a slightly lower temperature of 1325F. Striking colors such as Burnt Scarlet will develop more color with the second low firing and gloss up more. The opaline white used for the backing on some of them didn’t really strike at these low temperatures. After the first firing, I switched to iridescent clear for the back, which caused a bit of trouble. I intended for the irid to be on the back, but I guess I need new glasses, because some of them ended up with the irid on top. And at these low temperatures, the frit balls didn’t all stick and had to be redone by grinding off the irid where I wanted the balls.
Anyway, I hope you enjoy them, I had fun making them.

55 withdrawn

56 **Jill Wilson**

I was curious whether crackle technique could be used for insect wings; so, it seemed like a good project for the magless. Each butterfly has tekta with powder wings and a strip of irid glass to represent the body. The butterflies were shipped flat, but the wings could be slumped in an upward position.

1. Use fiber paper and sprinkle evenly with powder. I used pine green for some and medium amber for some.
2. Spray a fine mist of water over the powder. Let it sit for a while.
3. Manipulate the fiber paper until it cracks in a pattern. Let dry over night.
4. Fire to tack fusing temperatures. I topped with tekta before firing.
5. Cut out wing shapes on saw. Used a Taurus 3.
6. Clean all the rough edges with a brass bristle brush.
7. Top all the wings with a strip of irid to represent the body.
8. Fire at tack fusing temperatures.
9. Rejoice. Sixty of the suckers made it and were shipped on time.

57 **Charlie Spitzer**

I'm not sending a ‘how to’, since it's so easy to figure out how to do mine.