A typical layout blind has about 160 stubble straps. The need for thoroughness of coverage depends upon the local situation. Because of difficult circumstances, I double up on some straps and use about 200 bundles per blind. Expect to use about 8 lbs of raffia for each layout, but your situation may be more favorable.

Once you decide to use raffia, the first decision to make is: What kind of raffia to use. Raffia products are available from several sources in various packing conditions: small bundles, large bales, and various decorative raffia products. Here are my opinions of the some of these...

- Small bundles: These are typically available in 6 to 8 oz bundles. They can be found in craft stores like Michael's and Jo Ann's and even craft sections of large retailers such as WalMart and Target. Bundles are usually in strands of 40 to 48" length. Bundles cost from \$2.00 and up. A bundle will yield 9 to 12 hanks of camo material (average \$0.25 per bundle). Often the strands within the bundle are tangled and must be separated to use.
- Large bales: Bales are available commercially in 30 to 300 lb bales. Cost is pretty much negotiable with the seller (with minimum buy quantities), but shipping can be expensive.
   J M Stern and Frank's are often recommended source. Storage is also an issue as raffia to assure that the unused bale is kept internally dry. I have never used bales as I tend to keep only about 1500 bundles of dyed raffia on hand. Bales are most advantageous if you want to get into raffia big time.
- Decorative raffia products: Usually these are found at places that sell "Luau" supplies like Party City and Oriental Trading. Typically, they are called "table skirts" or "railing fringe". The most useful are natural raffia with no coloring or plastic decorations attached. One can expect a table skirt to yield 36 bundles. A railing fringe will yield about 32 bundles. Pricing is about \$12 each plus tax and S&H depending upon your sources location (average \$.55 per bundle). These products can be found at various party supply stores that carry luau items. There are also several internet based sources.

Of course one can purchase raffia products that are pre-dyed. I have done this and I immediately realized some pitfalls. First and foremost is the suitability of the coloring. No matter how good a job the folks making killerweed may do; their colors are generic and have limited application. Also, some raffia sold pre-dyed is actually dyed in Asia and the colors are seldom repeatable from batch to batch. The best way to be successful with pre-dyed raffia is by visiting the seller's warehouse and hand picking product.

Once you have raffia, the next decision is: which method to secure the raffia to your blind. Things to consider are: need for flexibility, ease of repair, and expected raffia lifetime. With all due respect to Fred Zink, my opinion is that his method is best suited for situation camo that is seldom changed and not expected to be used more than one season. With that consideration, the options that I use are wood clothes pins and plastic clips. My opinions...

• Wood clothes pins: Bundles are easily secured to a clothes pin by routing a 4" plastic zip tie through the loop of the clothes pin spring and around the raffia bundle. For added security, the spring ends may be hot melt glued to the wood. Clothes pins purchased in bags of 100 from WalMart cost about \$4 (\$0.04 each). Zip ties cost about \$0.09 each.

• Plastic clips: A more rugged method of securing raffia is to use plastic swivel clips. These may be secured to the bundle also using a zip tie, but I'd recommend using an 8" zip tie. Average cost for swivel clips is about \$0.25 each. Zip ties cost ~\$0.09.

A special consideration is the location of your raffia dyeing operation. It is messy and a certain way to cause domestic heartburn should you choose to dye raffia in a household interior sink or the washing machine. My choice is to use the gas burner on my patio barbeque. I purchased a stainless steel pot capable of holding about 2 ½ gallons of water, a 12" wooden spoon, a set of steel measuring spoons, a digital thermometer, and a pyrex 3 cup measuring cup. Of course the cost of propane fuel ought to be considered.

Rit dye is sold retail in  $1^{-1}/8$  oz dry boxes and 8 oz bottles of liquid. Prices vary, but for ease of use, I find the liquid to be superior. My experience is that color selection in big box stores like WalMart is limited. The best selections are in fabric and hobby stores like Jo Ann, etc.

Once some raffia has been in the dyeing process, it must be dried. I suggest that air drying is best. Just like laundry, a sunny breezy day is appreciated.

Dyed bundles of raffia plus some plastic vegetation:



Wood clothes pins with spring ends hot melt glued in the wood slot.



Plastic zip ties (4" green)



Measuring a raffia hank length from a "table skirt".



Trimming a raffia hank from "table skirt" cord



Raffia as Camo Material Measuring raffia hank for location of clip and zip tie.



Attaching clips to raffia hank with zip tie.



Cutting raffia hanks to final size (note angle cut).



Things needed for a raffia dyeing operation.



A 2+ gallon metal container, some tongs, a wood spoon and an outside grille.



Air drying outside on a breezy day works best.



Raffia as Camo Material
A couple of layout blinds in dried pasture grass with dyed raffia stubble.



It works!



## **Procedures**

Hanking	Action
1	Layout raffia material on a flat surface
2	From the bundled material separate into 6" to 9" widths of raffia strands.
3	Gather the cut raffia strands and measure about 5" from the end and secure the hank to a clothes pin or similar clip with zip tie.
4	Measure another 9 to 12" from the previous clip and attach another clip with zip tie until all possible 9 to 12" sections are bound.
5	Measure 9 to 12"" from the end and cut the hank into equal bundles
6	Repeat steps 2 through 5 until entire raffia material has been consummed.
7	Dispose of waste
8	Proceed to Dyeing steps
Dyeing	Action (wearing laytex gloves in highly recommended)
1	Using appropriate container preheat ~2 gal water to 100°F
2	Add 1 cup salt & 1 Tbsp detergent to heated water and disolve well
3	Mix dye combination in glass container with 2 cups heated water
4	Add dye mixture to ~2 gal heated water and mix well
5	Allow water to heat to 110° to 130°F
6	Add 5 to 6 bundled raffia hanks to water
7	Assure the bundles are well immersed in dye mixture
8	Let bundles steep in dye for 5+ minutes
9	Using tongs, turn the bundles and steep another 5+ minutes
10	Remove bundles and move to drying area
11	Repeat steps 6 through 10 as needed
12	Allow to dry completely (air drying is highly recommended)
	After dyeing 15 - 20 bundles, add ½ batch of dye to mixture to maintain color consistency
Hints	It is not recommended to perform a dyeing operation in the kitchen. Use an exterior propane grille.
	Care should be taken to dispose of unused dye mixture responsibly

All of the recipes require Rit dye, two gallons of hot water, plus the detergent and salt called for on the Rit package. These are creations based upon my own experimenting and not supported by Rit. You must consider all of these as a starting point as each location has it's own specific look.

Winter Wheat
1 Tbsp Rit Golden Yellow (powder)
1 Tbsp + 1 tsp Rit Yellow (liquid)
1 Tbsp + ½ tsp Rit Dark Green (liquid)

Green Pasture Grass
2 Tbsp Rit Yellow (liquid)
1 ½ tsp Rit Kelly Green (liquid)
¾ tsp Rit Black (liquid)

Brown Pasture Grass 2 Tbsp Rit Tan (liquid) 1/4 tsp Rit Dark Brown (liquid)

Corn Stubble 2 Tbsp Rit Yellow (liquid) 2 tsp Rit Tan (liquid)

Barley
3 Tbsp Rit Yellow (liquid)