Reader’s Question: Strings and Things

Brad,

Just a quick note to thank you for the old Newsletters from September 05 thru March 06. What a treasure trove of information. Thank you for the service you render to mandolin players everywhere. I wish I lived close enough for lessons.

I noticed in the March Issue that you responded to a readers question. I have one major question that leads to several minor points on the same subject. Perhaps other readers might have the same questions, it has to do with strings. I lived for awhile with the strings that came with my mandolin until I heard sounds from other mandolins that I liked better. After purchasing several sets to get just ideal sound for me, I have chosen .011, .015, .026, .041 in Phosphor Bronze - a Bluegrass sound. With so many string manufacturers available today, what is the ideal combination of strings?

Would any combination of strings create either a warm pleasant sound, or a brilliant, or which set of strings would produce the best tonal volume. Do you recommend a universal set, or is there an ideal set of strings that could be used for jazz, or Celtic, Brazilian, etc. How often do you change your strings? Is bronze better than steel? What are steps for the proper care and treatment for strings? How do you reduce or eliminate the unwanted harmonics that are produced by the strings between the bridge and tailpiece of an acoustic mandolin? What tips on strings could you pass along that might help or be of interest?

If the topic of strings is worthy of consideration to write about, feel free to change my series of questions to fit the direction of the points you want to cover.

Thanks again,
Bud

Dear Bud:

You are right. I have made no real mention of strings in past newsletters. And they are pretty important. Without them what would we do? Remember old Yukon Cornelius (second only to Bill Monroe in my admiration) from the infamous Rudolph the Red Nosed Reindeer animation flick? High on his shopping list were “Geetar Strings”.

As you probably already know, string choice is highly personal. There is no one set of mandolin strings that will please everyone. And there is very little real difference between a lot of the strings that are out there. Especially the plain steel strings. I will attempt to answer your specific questions more or less in the order you presented them. Your first biggie was “Is there an ideal combination of strings?” and here is my answer:

No. Not really. Not to me anyway. What I prefer (or my instrument responds best with) may not agree with your ear, your fingers, or your instrument. Over the last 30 years I have tried just about every string there is and many of them I really couldn’t tell one from another. I have even stuck a banjo 4th string on my mandolin as a D string in one emergency moment. I left it on there for 2 gigs before I managed to get some more strings.

I generally suggest to beginners that they start out with something pretty light (like a .010 to .034, such as Martin M400) until their fingers get some strength and resistance to pain. Most beginners I know and have taught ALWAYS have the nut too high and their mandolins act like egg slicers. Especially at the 1st and 2nd frets. You can’t truly judge a set of strings if your nut is too high. To determine this get a capo and slap it on the 1st fret. Now play the 1st fret notes. (The “real” 2nd fret.) Get a good sense of how much pressure it takes to depress the string. Now, pop the capo off and feel the 1st fret notes. Are they harder to press down now? They shouldn’t be! If they are, go see someone who knows how to lower the action at the nut. If you are a technophile you can measure the clearance with the capo on using some feeler gauges and “feeling” and then try to duplicate that without the capo in place.

I have, on at least a dozen mandolins, gone just a hair too far in making the nut slots deeper and then either have to shim the nut up and start over or make a new nut. You learn after a few nut jobs to take a swipe or two with the file and tune the dang string up and check it out before you go wild and and make that one extra stroke that adds 2 hours to your work and buzzes like @$%^$.

Anyway, let’s assume you have that nut all hunkie-dorie the way you like it. At that point you can get a better feel for how a particular guage string feels under the left hand fingers. Obviously the height of the bridge and the curvature of the fingerboard have an effect on this too. But, those can’t truly be adjusted until you have settled on the strings you intend to use. At least in terms of tension. D’Addario has on their web site the tension measurements for all of their strings and you might find it interesting to look at that. Obviously a higher tension string feels “harder” under the fingers and resists the pick a bit more. Higher tension strings also push down harder on the bridge and flex the top and neck more. For this reason, to fine-tune the truss rod it is best to choose your strings first. I don’t mean, one brand or another, but the gauge (light, medium, heavy) and overall tension. Heavies do bend the instrument differently than lights. Raising the bridge adds to the tension and that comes into play too.

A safe way is to start out with lights (like the 10-34 set), get your nut feeling good, adjust the bridge down or up so you don’t get buzzing and rattles when you chop it, then take a look at the truss rod. The truss rod counters the forward pull of the strings and if the strings are heavier or lighter it may not produce the same relief in the middle of the fingerboard. One way to test the truss rod is to sight down the fingerboard without the capo in place. 

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neck it often is out of line slightly with the majority of the fingerboard and can create an illusion of too much bow. What I like to do is fret a string at the first fret and about the 14th fret (before it goes airborne) and let the string act as a straight edge. If you spread your fingers out and press the string down you can reach in the middle of the string and lightly press it down and see if there is any clearance. There should be a tiny bit of clearance in the middle—forward bow. Not much or you will work your fingers to death while playing. Just a little bit. If the neck is too flat or backbowed you have no choice but to jack the bridge up to keep it from buzzing and that is not the best way to go.

Incidentally, I would leave the truss rod adjustments to someone who is experienced. Not just someone who says they are experienced. Ask around. Get someone who really knows something about a mandolin to adjust it. And, be prepared to readjust it from time to time whenever your "string straight edge" test says it is out of whack. Fooling around with truss rods is best left to the experts. (My expert is Bob MacIsaac in Duluth, Georgia.)

It may seem that I have veered from the topic of strings and I have but it must be kept in mind that there is never one aspect of mandolin setup that will turn your instrument around and make it roar like a Loar. It is a system and all parts of the system must be considered. This includes frets and fretwear, nut height and material, string gauges, composition and tension, bridge construction, height, fitting and placement, neck curvature and truss rod adjustments, type of pick, picking style, muscle strength, etc. etc. It goes on and on. Bottom line. Don't look to a string to make you sound good. Strings help. So do all those other things. And practice.

Back on strings in particular, spacing is important. And so is the "level" of the strings in a plane parallel to the fingerboard. Nut slots and bridge slots cut haphazardly or "fooled with" often leave you with strings that stick up higher than others. My opinion is that the strings should match the radius of the fingerboard and be pretty level across the tops. Mine isn't. But I think it should be. Maybe during the next refret I will get that straightened out. Now, back to the questions:

Do I change my strings often? No. I hate changing strings. I play about 8 gigs each month and who knows how many hours I play during lessons and practicing but I still only change my strings about every 6 weeks or so. I personally don't like the brassy "zizzz" that you get with new strings and for me I like them when they are played in for about 4 to 6 hours. They start getting a bit thumper and I start liking them better. If I break a string, and that doesn't happen too often, I usually change the string on the fly and then do the rest of the set in the morning. Also, if I begin to notice that the E string is sounding flat when I play up near the 12th fret I change them all. If I notice that I am having to "choke" the E string to the side to get it in tune I know I have waited way too long.

I am going way too deep into all of this and not getting around to the rest of the questions so here are Bud's questions with my quickie answers in parentheses:

"Do you recommend a universal set, or is there an ideal set of strings that could be used for jazz, or Celtic, Brazilian, etc." (Not as far as I am concerned. I don't really know anything about Brazilian anything, except Brazil nuts, so I definitely don't know about that.)

"How often do you change your strings?" (Answered above)

"Is bronze better than steel?" (To me, yes. I like the sound better. I am not too big on Phosphor Bronze though. Seem to get dead too fast for me. I like 80/20.)

"What are steps for the proper care and treatment for strings?" (I don't do anything. I suppose I should wipe the crud off once in a while, but I never do. I do, maybe once during the last days of a set of strings, loosen the 4ths and 3rds, and while they are partly loose snap them really hard a couple of times by yanking them up and letting the slap the frets. Or I might loosen them enough to unhook them at the tailpiece and form a loop about 2" in diameter in the free end of the string. Then, holding the end of the string, I roll the loop up and down to the nut and back a couple times. It breaks all the crud and crap free and wakes them up a bit. I learned this in the piano tuning business and it is called "rolling the bass strings". When I am finished rolling them I give them a half turn to tighten the winding and stick 'em back on. This has saved me at least $4 in string costs over the years. Especially on the mandocello. But, you should try it and you will be surprised how you can liven the bass strings for at least a temporary fix.)

"How do you reduce or eliminate the unwanted harmonics that are produced by the strings between the bridge and tailpiece of an acoustic mandolin?" (I have a bit of buckskin glued across the upper surface of the tailpiece that contacts the strings as they leave the tailpiece. It quiets the strings somewhat but doesn't totally deaden them. I have often wondered about coming up with a device—perhaps 8 Reagan banjo fifth string capos—whereby you could tune those segments of the string to a particular note and just see what results. Never got around to fooling with the idea. It is done on some high dollar pianos and I am sure make a heck of a selling feature in the showroom. Whether it really sounds better I can't yet determine.)

"What tips on strings could you pass along that might help or be of interest?" (Definitely use them. Strings help the overall sound of a mandolin. Sorry I couldn't resist.)

Last thing... I use Martins because "Wild" Bob (mentioned earlier) gets me a good deal on boxes of them when he gets around to it. I have also "rolled my own" from Euphonon a few times over the years. I have a gig tonight and I guess I will go change my strings now.

The Answers to Last Month's Pop Quiz...

1. How many notes are found in the G7 chord? 4
2. What 3 notes make up an F major triad? F, A, C
3. If you go from any open string to the next higher open string what interval have you played? 5th
4. If a song is in the key of A, what is the I chord? A
5. What is the VIIb chord in the key of A? G
6. In the key of C what chords are to be played if the progression is I, IIm, IV, V, ? C, Dm, F, G, C
7. Which fret on the mandolin divides the length of the string in half? The 12th fret.
8. The distance from the nut to the 7th fret is ___________ of the overall string length? 1/3 of the length
9. In standard tuning how many different pitches can be played on a mandolin up to and including the 15th fret? (No string bending please.) 37
10. The F pentatonic scale includes what notes? F, G, A, C, D

How did you do on the quiz? If any of these questions didn't make sense to you I suggest that you consider reading my first book "Mandolin Master Class." It doesn't cover everything mentioned in this quiz but it will bring a D student up to a solid B.
Brad, Congratulations. Your Master Class is the most informative learning material that I have come across yet. I have instructionals from Huckabee, Bibey, Baldassari, White, and McCoury, but they cannot compare. And here you are in my back yard. Thanks for the great job. Can’t say anymore as I must get back to work on studying the material. P.S. I will be ordering the Training Camp today. G.B.

I retired 5 years ago and last year I purchased a Morgan Monroe carved collector’s F-style (Cherry burst) mandolin, found a highly recommended teacher, and took lessons for about 3 months before I realized he favored the guitar. So since then I have been struggling on my own, not making much progress until I discovered your books. With the practice regimen you have outlined I should see some progress in a "month, year, or decade."

Thanks for sharing your knowledge and humor, with those of us who are struggling to become better mandolin players. B.N.

If you are interested in the books check ‘em out for yourself at www.mandouniversity.com

(THIS MONTH’S BLATANT SELF-PROMOTIONAL PLUG.)

A Mandolin Tune: Pigeon Hill
written by Bradley Laird

Have you ever hiked the trail around Kennesaw Mountain? Kennesaw was the site of a major battle between the North and the South just before the fall of Atlanta. I have hiked that trail a few times. Up Big Kennesaw, then Little Kennesaw, then Pigeon Hill. Go up there and hike that trail and in the deep ravine between little Kennesaw and Pigeon Hill think about the hell that was dished out, the hot lead, the blood and the smoke. That place should not be a "park" for picnics, water bottles, dogs, the Walkman®, and synthetic jogging pants. (Though that is mostly what you will see there today.) That place is a ghostly memorial. To me, this tune is also. I plan to record this pretty soon. Has a feeling like it was written “way back when.”

A

G  D  A  D  A

A

D  A

Note: The slide in the last measure just means to slide into that 4th fret note from one fret below.

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