

## **Sluicing - How to set the correct angle on your sluice box**

### **• Sluicing •**

I can't tell you how many times someone has asked, "What angle do I set up my sluice box". The worst part is, there is no stock answer. Every river and stream is different. The average specific gravity of the sand can vary so much, there is not one setting to go by, water flow may be faster in one spot than another. I have moved up river 50 ft and had to change the angle.

Here is a sure fire way to tell where your angle belongs. First off, you will have to move any larger rock through your sluice. If you classify your material (getting out the big stuff), you may be able to use less flow or angle. You have to understand that, the riffle is the catch. As water flows over the riffle it makes what is called an eddy, this is a back flow that puts down a low pressure area just behind the riffle. I'm not going to go into riffle design here, but know that the riffle is the key. Some riffle's like fast water and some like slow. Makes no difference here.

To set up the box you have to move all the large stuff off and then get rid of most of the heavier sands. A box is running right when you fill the front with gravel (and hopefully some gold). When the box has finished running the gravel down onto the riffle area of the box, the space fills between the riffles, you can start to look for the last of the gravels to leave the front of the box. Now, if the box is running too slow, you will not see most of the carpet clear behind the first riffle for something over 45 seconds of time. If the box is running too fast then you will see most of the carpet in 15 sec of time. Remember that the box is affected by four things: average weight of the gravel, size of the gravel, water flow throughout the box, and the angle of the box. When you get it set for time you are ready to go mining. Remember 45 Sec. is too slow and 15 Sec. is too fast.