



INSTRUCTIONS FOR USING YOUR SLUICE

INITIAL SETUP:

Place sluice in the stream flow as noted in figure 1. Start with front water level just under mid-height of tray and rear of sluice just below water level. Maximum recovery occurs when the sluice angle is as shown in figure 1 and stream flows are moderate. Place a rock next to each side vent to create a “wedge” and another rock or other heavy item across the tray to hold the sluice down. Make sure water flow is not affected. Note: a good method is to set your sluice on top of two flat rocks, one slightly higher than the other. This creates a stable platform to operate your sluice. You will need to adjust the water or angle as necessary to meet changing water conditions. The perfect water flow is achieved when dropped material clears the tray in one second. A good test is to stick your fingers into the upstream side of the vents – If you feel good suction on your fingers then it can create the necessary force for cleaning and processing material in the tray.

If water conditions are slow:

1. Create a “v” dam upstream of the sluice to channel the water – this will increase water speed.
2. Reduce water height at front of sluice by raising it out of the water (this increases the sluice angle).

If water conditions are fast:

1. Place the rock about 3-5 feet upstream of the sluice to slow the water down and adjust distance until proper flow is achieved.
2. Raise rear of sluice out of the water and lower front of sluice into the water (this reduces the sluice angle).

By using these techniques you will soon discover the perfect settings for your favorite spots throughout your mining season. Remember: nothing too drastic – very subtle changes may be all you need. Another important consideration is water depth – While the sluice can operate in water levels barely deep enough to submerge the rear of the sluice with proper stream velocity, the sluice operates best in water 5-8 inches in depth or greater. This allows the volume and velocity of water necessary to power the fluidizing vents.

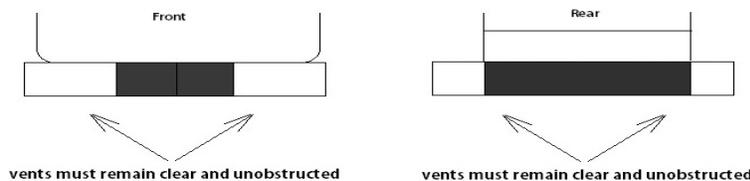
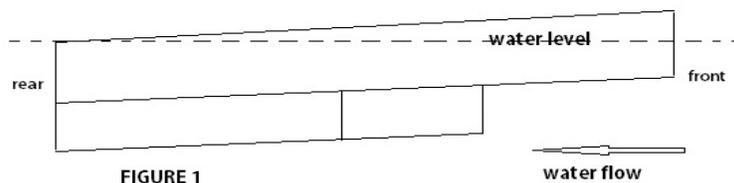


FIGURE 2

It is critical to sluice operation that first, the sluice intake and exhaust vents are free from obstructions and second you have sufficient water flow AND volume. (see figure 2) The sluice uses water speed and flow to accomplish optimal fluidization, material washing and flushing of waste material. If material flows smoothly through the sluice without hanging up and stopping in the tray and you can see waste material coming out the rear of the sluice then sluice is set correctly (see figure 3 and 4). It is normal for individual rocks or debris hang up on the screen or lid - simply brush these away by hand.



Figure 3



Figure 4

MATERIAL PROCESSING:

Material should be classified at either three-eighths or half inch ($3/8$ or $1/2$ "). If water conditions are slow you can classify down to quarter inch to make it easier to process. This is one way to extend your mining season as water conditions decline.

When using the smaller sluice, grab handfuls or scoops of material from your bucket drop onto tray at the sluice front. A side to side drop works best. You do not have to wait between drops – material should go through the sluice quickly. Remember to remove rocks or debris that hang up on screen or tray. Also remove any small rocks that lodge in the screen holes. You can also slowly dump material from the bucket directly onto either sluice. We suggest using a 2 or 3 gallon bucket for better control.

You can continue to process material until the sluice capacity is reached. You will need to gauge how many buckets you can put through the sluice based on the density of black sand or other heavy concentrates. Start with 2 or 3 buckets on the small unit and 4-6 buckets on the larger unit and adjust accordingly.

STREAM REMOVAL AND CLEAN-UP

Make sure that the sluice has been running clear for a few of minutes prior to removal from stream - This allows the sluice to flush unwanted waste material.

Removing your sluice from the stream is similar to removing standard sluice boxes. Grasp both ends of the sluice and lift straight up out of the water. Pour water on tray off the front of the sluice (flare). Release the latches and lift cover to expose material tray.

Clean-up is quick and simple and should take less than three minutes:

1. Put rear of sluice or material tray over a bucket or pan.
2. Gently splash water into material bed and direct material into bucket or pan.
3. When bed is clean splash water up onto tray then into bed entrance near screen. Look for any gold caught in tray area, screen or bed.
4. Make sure to inspect and clean vents and remove any small rocks or material from screen prior to returning sluice into the water.

After cleaning and inspection your sluice is ready to be returned to the water.

If you have any questions please watch the instruction videos at
<http://snakeriverproducts.com/?product=recon>
<http://snakeriverproducts.com/?product=expedition>
or give us a call at (916) 833-5947.