

Care and Maintenance of Bowed Stringed Instruments

The magnificence of a bowed stringed instrument is in their longevity. Properly maintained, your instrument can live for generations, all the while sounding better and better the more it is played upon. Under normal care, such an instrument needs little attention. Here are the keys to keeping your instrument safe and preserving the fine sound and quality for years:

Temperature and Humidity

Being aware of your environment and relative humidity is critical to your wooden instruments. You must be aware of the safe ranges of humidity and temperature to keep the wood from cracking or shrinking due to the environment. Sudden drying is very dangerous for your wooden instrument and must be avoided at all costs. Cracks can occur over the course of only a few hours when the humidity drops suddenly. Generally, you should keep the relative humidity between 30 and 60 to keep the instrument safe. This can be measured by the use of a hygrometer, a tool that measures relative humidity. In desert environments, the humidity generally stays below 30 all year long. Here, it is important to keep the instrument humidified at all times. This can be accomplished by humidifying the room in which the instrument is stored. However, it is critical that the humidity be maintained when the instrument is removed from the room that is humidified. Case and instrument humidifiers are available at your violin dealer that will keep the inside of the case, or the inside of the instrument properly humidified. In areas that change dramatically in temperature from winter to summer, the instrument is in most danger during the winter months. When the temperature is below freezing outside, the relative humidity inside drops dramatically when the dry air is heated to room temperature. Electric radiant heat and wood burning dry the air more than forced air heating systems. Do not store your instrument near a source of heat!

Strings

The string is the soul of the bowed instrument. The body acts as the amplifier, but without the string there it is nothing. Strings can be made of many materials, from natural gut to synthetic substitutes. The relative tension and tone differ based upon construction. It is best to try different strings on your instrument to find the best sound and response for your particular style of playing. An experienced teacher or dealer can help you in this process. Once you have selected a string, it is important to keep them fresh. Generally, strings should be replaced between 6 months and 1 year of regular playing. Otherwise, they will gradually stiffen and rob your instrument of the best tone and response. A spare set should be kept in the event of premature breakage of a string.

Avoid Damage due to Storage

Celli and Double basses are especially susceptible to damage due to improper storage. If the instrument falls from an upright position, it will cause severe damage to the neck and body of the instrument. It can cost a substantial amount of time and expense to repair, and the instrument may never perform in the same manner as before it was broken. To avoid this, keep the instrument on its side, or in an approved hard case, or instrument stand.

Violins and Violas can be damaged due to a case that does not have adequate suspension inside. If the case does not pad the instrument in critical areas, damage will occur. Most modern cases have adequate suspension systems, but some do not. It is important that you discuss this with a dealer who can show you where it is important to protect the instrument to avoid damage.

The Bow

Generally the bow should be rehaired with non-bleached natural horse hair on average once per year under regular playing conditions. The hair will become clogged with rosin and dirt and will not perform properly over time. Do not touch the horse hair as the oils from your skin will interfere with the rosin/hair relationship. Loosen the bow when not playing to keep the hair from stretching and to relax the stick to avoid warping. If you are going to store the bow for an extended period, place it in a plastic wrapping that is completely sealed. This will keep "bow bugs", otherwise known as carpet beetles, from eating the hair on your bow! They will not harm the bow hair if played on a regular basis.

The Bridge

The bridge is the part of the bowed instrument that holds the strings from the body of the instrument. A properly fit bridge can last the life of the instrument if cared for. It should remain upright and not be allowed to lean. If not vertical, the pressure from the strings can cause the bridge to warp, and eventually fall over and break. Go over the proper care and straightening of the bridge with your teacher or violin dealer. If you have to change strings, or tune the instrument from being substantially out of tune, the strings can cause the bridge to creep forward towards the fingerboard. Look at the bridge periodically to ensure the feet are fitting completely and the bridge is in an upright position. A bridge must be professionally fit to perform properly and fit the instrument perfectly.

The Pegs

Even properly fit pegs can slip with changes in temperature and humidity. The pegs will shrink and swell with changes to the environment. It is not uncommon for them to slip in the wintertime when the humidity is lowest. When tuning, you must push inward while turning the peg. If they are slipping, you may have to press inward substantially. If they refuse to stay in tune, peg compounds and drops are available that can lubricate the pegs and keep them from slipping badly. A violin dealer can inspect the pegs and determine whether they are properly fit.

The Fingerboard

A properly surfaced fingerboard should not buzz when bowing or plucking the strings, while remaining easy to play. Most fingerboards must be professionally planed when the instrument is new to accomplish this effect. Years of playing can wear grooves in the fingerboard that can be removed by resurfacing. If the instrument is difficult to play or is buzzing, a violin shop can determine whether adjustments can be made to correct the situation.

The Soundpost

The soundpost must be properly fit so as to be in the correct position and not damage the instrument or be detrimental to the sound. Changes in relative humidity can affect how the post is fitting also. If the response of the instrument changes, adjustments to the post can restore the original tone and response of the instrument. It is best to have your instrument looked over once a year when changing strings and having the bow rehaired.