

# When is the Best Time of Year to Have My Piano Tuned?

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As a piano technician, I am often confronted with this question. I remember one well-meaning client who said they were told never to have their piano tuned at certain times of the year, and insinuated that I was amiss for even conducting business during those seasons. Other piano owners seem unaware of the issue; the idea that seasonal changes can affect the tuning of a piano is new to them. But whether we are conscious of it or not, this is an important issue that can affect how well a piano stays in tune.

So, when is the best time of year to tune a piano? The answer is not as straightforward as one might think. There are many variables to consider in making an informed decision. To start with, we have to ask a very fundamental question: Why do pianos go out of tune?

## Why pianos go out of tune

The basic and most simple answer is this: changes in temperature and humidity. A piano is made of natural components such as wood, felt, and even metal. These materials react in subtle yet significant ways that can affect the tuning of an instrument. High moisture content will result in the wooden soundboard “crowning” or swelling, affecting the bridges attached to it. This results in increased tension on the strings, changing their pitch (sharp). When humidity drops, the soundboard and bridges will flatten out, again changing the tension and pitch of the strings (flat). These changes in pitch are never even across the piano, causing the piano to sound out of tune.

Throughout the year, as seasons change, temperature and humidity fluctuate quite substantially. Here on the prairies, although the weather is generally dry, the difference in humidity levels between summer and winter can be enormous. This is especially due to the extreme cold temperatures during the winter. When you take air that is  $-20^{\circ}\text{C}$  at 100% relative humidity and heat it up to  $+21^{\circ}\text{C}$ , the humidity drops to roughly 5%. Without any sort of humidity control in a home, the air becomes extremely dry in the wintertime. That is a drastic change from the 50-80% humidity commonly experienced during the summer months.

There are other factors that can cause a piano to go out of tune. Brand new pianos, or pianos with new strings, will lose their tune as the strings stretch over the first year or two. Old pianos with loose tuning pins or cracked bridges will have trouble holding tune, and may need extensive repairs done to be made tunable; occasionally the only solution is to replace the entire piano. But by far the greatest impact on a piano's tuning is climate.

It is important to realise that these changes in humidity affect a piano whether or not it is played. Heavy playing of a piano can accelerate the effects of seasonal changes, but those effects are inevitable. While some pianos are more susceptible to climate changes than others, the fact is that every piano – good or bad, upright or grand, new or old – will go out of tune when subjected to extreme changes in temperature or humidity.

### **Predicting seasonal changes**

Based on the above information, it should be clear that it is best to avoid tuning a piano during a major seasonal change. When we turn on the central heating in our homes during the fall, or when we turn it off in the spring, this has a great effect on indoor humidity levels. The ideal time to tune a piano is several weeks after that change has occurred, when you know the humidity will remain constant for the longest. This is not always easy to predict, however, as our weather in the prairies is notoriously unpredictable.

Generally speaking, if you have your piano tuned in March or April, chances are that it may be out of tune again by mid-June. Conversely, if you have it tuned in mid-June, it may hold its tuning until the fall (although freak high humidity in mid-summer might wreak havoc on the tuning). Tuning a piano in the fall, while desirable for other considerations (see below), presents some complications. Fall is a particularly unstable and unpredictable time of year. A piano that is tuned in September or early October will likely go out of tune by December. A piano tuned in December or January, however, may hold its tune well until the snow melts and the humidity rises in the spring.

Because of these changes, many clients (particularly piano teachers and professional pianists) tune their pianos two to four times per year. Obviously that may not be feasible for every piano owner. The standard recommendation for tuning frequency is “at least once a year”. This helps to ensure that the piano does not fall severely flat in pitch, and also provides the opportunity to detect and address any maintenance issues that may come up. But regardless of frequency, environmental factors are important to keep in mind.

The bottom line that I tell people who ask me is that in our climate there really is no good time of year to tune a piano. There is always a risk that climate factors will interfere with the tuning in some way. There are, however, some preventative measures that you can take, which we will discuss shortly.

### **Other Considerations**

Climate changes are not the only factors to consider. Schools and teachers usually want their pianos tuned for the start of lessons in the fall, and students are often encouraged to do the same. Occasionally there are important events or performances that require a piano to be tuned at a particular time. Piano owners may want their piano to be in tune for particular holidays or family reunions. Concert venues will usually have the piano tuned at least once before every performance. These sorts of things may take priority over seasonal changes.

Pianos also usually require a tuning after being moved. It is well-known that moving a piano will affect the tuning, but the reason is often misunderstood. Most pianos (unless it is a small, poorly-built upright or grand) are not affected by the actual move itself, but by the changes in humidity and temperature that accompany the move. It is advisable to wait two to three weeks after

moving a piano before having it tuned, to give it a chance to acclimatise to its new environment and ensure a more stable tuning.

Another factor to consider is how the piano is being altered in pitch. Pianos will generally become sharp in the summer (with high humidity) and flat in the winter (with low humidity). When a piano is drastically sharp or flat, it will require more work to get it in tune at the proper pitch, and the initial tuning will be less stable. For this reason, if you tune your piano once per year it is a good idea to have that done around the same time each year. That way the piano will be at roughly the same conditions as it was the last time it was tuned, which should result in a more stable tuning.

### **What you can do to help keep your piano in tune longer**

While everything we have covered so far may sound like bad news, the good news is that there is something you can do about it. The biggest factor in maintaining tuning stability, by far, is humidity control. If we lived in a perfect world, every piano owner would have a climate-controlled room for their piano where the temperature and humidity levels were monitored scrupulously and never fluctuated. But even in our imperfect world, every little bit helps.

Most piano manufacturers recommend 40% to 50% relative humidity as the ideal conditions for any piano. But in actuality, the most important aspect of humidity control is *consistency*. Even if the piano is only at 30%, if it was kept consistently at that level all year round it would have the best possible tuning stability.

There are three main ways to control the humidity levels in your home: The first is by having a humidifier installed into your furnace, which adds moisture to the air as it is heated. Many modern houses have that built in already. While this doesn't completely eliminate fluctuations in humidity, it does help avoid the extremely dry single-digit RH levels in the winter. A second option is to use a portable in-room humidifier and have it run during the cold season. This can make a big difference, provided it is maintained and monitored consistently. The third option is to purchase a humidity control system that is installed directly in the piano. Such a system can be purchased and installed by your local piano technician. It consists of both a humidifier and dehumidifier component, and creates a microclimate inside the piano that is kept right around 45% relative humidity. Perhaps the best solution in any given situation would be some combination of the three. Every little bit can help to keep you piano in tune longer.

In short, there is no cut-and-dried answer to the question of when in the year you should tune your piano. But hopefully this article helps in making an informed decision. Every piano owner deserves to be made aware of the effects of seasonal changes on tuning stability.