

What is the Lifespan of a Piano?

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It has happened to me many times. Every piano tuner knows the experience. You arrive at a home to tune an old family heirloom that contains inestimable sentimental value for the owners, but a few moments with the piano tells you the sad truth: The piano has reached the end of its useful life.

Whether we like it or not, all good things come to an end at some point. This fact is just as true of pianos as it is of anything else. Sometimes we take for granted the longevity of the piano; after all, it is not uncommon to find pianos built in the early 1900's (or even the late 1800's) that are still in use. But pianos do not last forever. They too are mortal.

A piano can be compared to an automobile in many ways. No one buys an unrestored 50-year-old car and expects it to run well, much less be a good vehicle for their teenager to learn how to drive on. The same concept applies to pianos. However, unlike automobiles or household appliances, pianos tend to last quite a bit longer.

So how long does a piano last? That is kind of like asking how long a car lasts. The answer is, "It depends..." What kind of piano is it? How well has it been maintained? How much has it been used? Has it been (completely or partially) rebuilt? There are many variables involved, one of which is the difficulty in precisely defining the "point of death" of a piano; one person might consider a piano to be "dead" while another person thinks it has lots of life left in it. All the variables aside, the standard recommendation in the industry for the *average* lifespan of a piano is 40 or 50 years. Of course, some pianos last longer, and some don't even last that long. The average lifespan only offers us part of the story; to get a full answer to our question we have to first look at the ways that time and use affect a piano, and the limitations of an old piano as over against a new one.

The Effects of Age on a Piano

There are a number of things that happen to a piano as it ages. The most obvious is the wear and tear from being played. As a piano is played, the hammers will compress and develop string marks, which over time can turn into deep grooves that impede the instrument's tone. Other action felts will also harden and compress over time and result in clicks, rattles, and other noises. The key bushings will wear out, resulting in a loose, sloppy feel and noisy play. And action centres can wear out or break, requiring replacement parts.

But even pianos that are never played will experience some effects of aging: Action felts and hammer felts can harden or lose their resiliency; wound strings can loosen and become dull; and action parts can seize or become too loose. If a piano is not tuned for years, the strings will slowly lose their tension and may be difficult or almost impossible to get back into tune. Add to that environmental effects from changes in humidity and temperature: Loose glue joints, cracked soundboards and bridges, loose tuning pins, rusted or corroded strings, etc. These and other

problems will cause certain notes to not play or hold their tune and excessive buzzing or rattling. Often these issues cannot be easily repaired. Even more damage can result if the piano is exposed to extreme heat, cold, moisture or dryness, or from misuse such as dropping the piano, spilling liquids on the piano, etc. A piano that has been in a house fire or a flood, for example, usually cannot be salvaged.

The various effects of aging over time will add up to the point where the piano is compromised in tone and touch, and functionality is limited. An older piano will have more difficulty conveying dynamic expression, and will be harder to control. The more a piano has aged, the more musical limitations it will have. For a student trying to learn on such a piano, this can be extremely frustrating. Often a student's decision to discontinue taking piano lessons can be traced back to the instrument that he or she was forced to practice on.

A note here is in order regarding the *quality* of an instrument. Predictably, a high-quality piano will last much longer and be in much better shape than a low-quality instrument. In the history of piano manufacturing, it is well-known that production quality went downhill drastically after World War II as compared with pianos built in the early 1900s. This was due to a number of factors, not the least of which was the introduction of the *short piano*. Smaller pianos, both grand and upright, are inferior in almost every way to larger pianos, despite how well they have been marketed. Thus it is not unusual to find spinets and consoles from the 50's and 60's that are reaching the end of their useful life around the same time as old, tall uprights from the 1910's and 20's. Even in almost-new condition, a miniature-sized piano will have limitations in its musical ability, and those limitations will only increase as the piano ages. As a general rule, if the piano was a "cheap" piano when it was brand new, chances are its lifespan will be that much shorter.

What about Restoration?

One of the amazing things about a piano is that once its useful life is over there is the possibility of having it "resurrected". Restoring a piano involves refurbishing the action with new hammers, felts, and other parts; replacing or repairing the soundboard, bridges, and pinblock and replacing the strings; and refinishing the cabinet along with any structural or cosmetic repairs. A rebuilt piano, if the rebuilding job is thorough and the work was performed by a reputable piano rebuilder, can be as good as a brand new piano.

Not all instruments have viable restoration potential, however. From a purely financial standpoint, restoration is usually only feasible on grand pianos over six feet. Except for very high-end makes – such as Steinway, Mason & Hamlin, Bechstein, Bösendorfer, etc. – an upright or a small grand is not worth restoring, as the cost for a complete rebuild (in the ballpark of \$10,000) will exceed the value of the instrument. In some cases a "partial restoration" may be viable. An upright piano, for example, may have the action refurbished and strings replaced, but retain the original soundboard and pinblock. Also, a high-use piano may need to have hammers replaced long before the rest of the instrument wears out.

The restoration potential of a piano can be further limited in cases of severe damage. A crack in the cast-iron plate (the irreplaceable “backbone” of the piano), for example, can be a death-sentence. Smoke damage, heat damage, and water damage can also limit an instrument’s viability for rebuilding. But aside from such cases, restoration is a desirable option for a piano that warrants it, and will renew its useful life and offer decades of use.

Conclusion

All this goes to show that there is no cut-and-dried answer to how long a piano lasts. Every piano is different with a unique history of its own. 40 to 50 years may represent the average lifespan of a piano, but practically speaking the variance can be much greater. A piano that is 100 years old may still function, but whether or not it functions *well* is another question. Chances are, that piano will never be able to perform to the standards of a newer instrument. It is important to understand the limitations that a piano acquires as it ages, and that these limitations are not lost on a student who is struggling to make her piano sound like her teacher’s. As tempting as it may be to assume an old, cheaply-acquired piano is sufficient for a beginner pianist, skimping too much on the quality of the instrument may compromise the ability of that student to continue her musical education.

Different pianists have different requirements, and for some situations a piano may be suitable that in other situations it would not be. In the end, it is encouraging to know that a good quality piano, when maintained well, is a long-term investment that will provide musical pleasure for years to come.