

Proposal:

We should build a high quality work bench for the wood shop as a group project at hacksburg.

Justification:

A quality workbench is the foundation for all projects. A solid stable work surface, (that can be made level and flat) is critical to many project and useful for all. In addition to a work surface, a decent work bench can be the mounting point to a number of vices and fastening devices (such as dog holes) that ease projects. Our current work bench is not stable, flat, level or solid. The only vice that can be attached to it has limited capabilities.

Why build when we can buy. Good quality work benches can cost thousands of dollars. I believe there are decent benches available for ~\$500, though I have not had experience working with these benches. There are also a number of work benches for less. I am suspicious about these but again do not have any experience with them.

On the low end of cost, our build we could be made from dimensional lumber. Below is a video and plans that detail just such a bench. The claimed cost is ~\$200. Alternative bench plans, also listed below suggest using approximately 150 board feet of lumber. If we source our own lumber i suspect we could find beech or another hardwood for ~\$5 a board foot. This would mean a project cost of \$750. In addition to a high quality result, I think the project is a great opportunity to learn some basic wood working skills. Furthermore, we could (either now, or as a later project) add storage space to the lower section of the bench, which is always needed in the shop.

I would like for this to be a group project where people can participate in the planning and execution. However, if others are not interested in participating, i think i can manage this build myself.

Some additional tools we may need depending on the plans we go with:

New jointer knives

Router plunge base

Router bits

Forstner drill bits

Dado blades for table saw

Bench Plans:

Hardwood bench plans:

https://benchcrafted.com/cdn/shop/files/file-classic_bench_construction_notes-instructions.pdf?v=1018357878393757823

Dimensional lumber plans:

<https://scottwalsh.co/blogs/shop-projects/construction-lumber-workbench>

References :

<https://benchcrafted.com/>

Dimensional lumber bench with lag bolt top mount

<https://www.youtube.com/watch?v=MviF3g0UCdE>

Dimensional lumber bench with through tenon top mount

<https://www.youtube.com/watch?v=fg5qjed7u-k>

Dimensional lumber bench with home made twin screw vice

<https://www.youtube.com/watch?v=aKiXGMpHzzc>