

# My Balsa & Glass Workshop

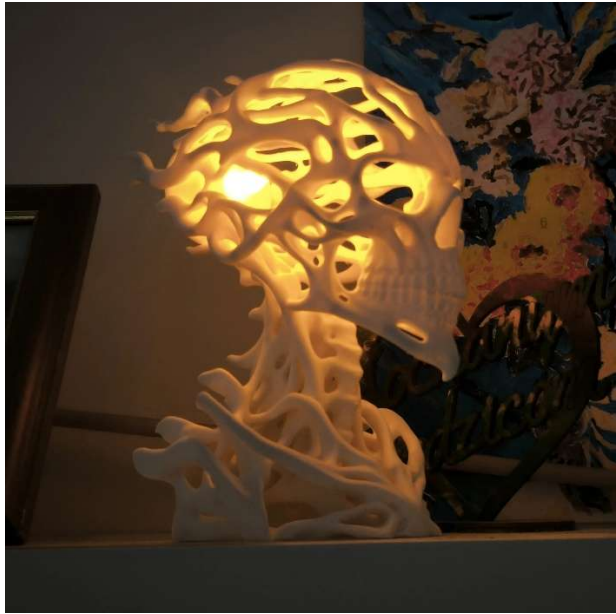
## "Bonewraith" - Twisted Skull LED Lamp

### 3D Print/Assembly Description

19 October 2026

I'm still busy working on more 3D print & builds for Christmas 2026 gifts. I next decided to attempt something for my daughter-in-law Beth. She loves Halloween and has all kinds of decorations they put out and display throughout their home in Clarksville, TN each fall. So, I thought I would see what I could find to add to her collection. After searching the web, I found something different on makerworld.com. There I located a model by **Servo** of ServoCraft called the "**Bonewraith**" a Twisted Skull LED Lamp and shown in the three images below. Servo has 42 other 3D models in his Halloween Collection (<https://makerworld.com/en/collections/2834940-halloween>) so check them out. This 3D model is a single .STL file and also available as a .3MF file to load directly into your slicer. These files can be downloaded for **free** from the makerworld webpage (<https://makerworld.com/en/models/3389650-bonewraith-twisted-skull-led-lamp#profileId-3857718>).





Source of Images: makerworld.com

This twisted skull is built from organic, bone-like shapes that create a completely different look depending on how you display it. It works great as a standalone decoration, but you can also place an **LED tea light inside**. With the warm yellow glow, the skull almost looks like it's **on fire**. The light can also shine through the twisted structure, creating unusual shadows and patterns on the walls around it.

The skull is designed to work with **Maker Supply LED tea lights**, as well as slightly smaller tea lights. I was able to find the correct size LED tea lights on Amazon @: [https://www.amazon.com/dp/B07D18B6JM?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B07D18B6JM?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1). The LED tea light can be placed in **two different positions**:

**Inside the skull** for a strong internal glow that makes Bonewraith look almost like it's burning from within.

**Behind the skull** to let the light pass through the twisted structure and create interesting shadows on nearby walls.

Choose whichever effect you prefer.

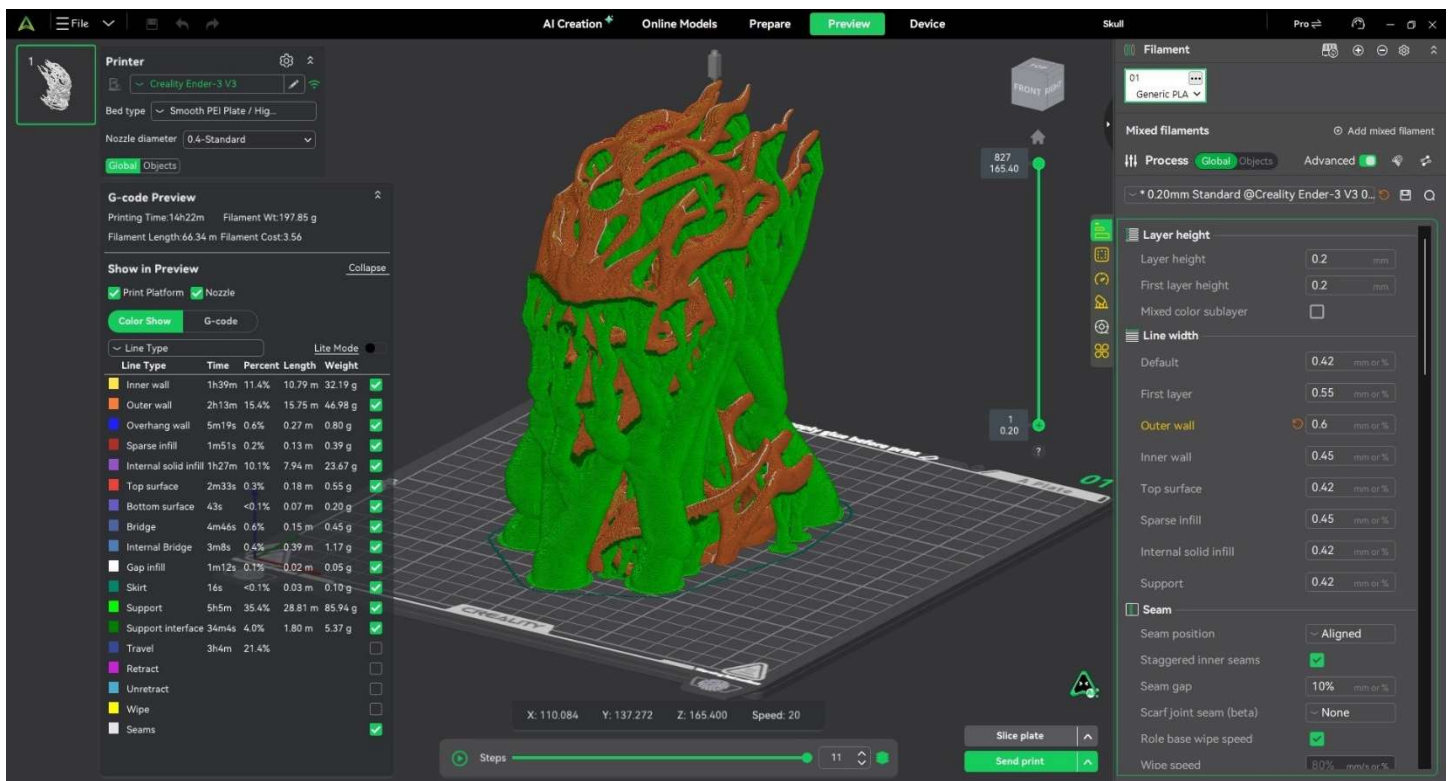
## "Bonewraith" 3D Printing

As quoted from Servo, *"I would recommend this model for **more experienced makers with a well-calibrated printer and filament**. I really enjoy projects that test the capabilities of our machines, and I think Bonewraith definitely belongs in that category. I spent quite a bit of time designing the model to **minimize the amount of supports needed**. I managed to arrange the twisted structures around the head so that supports don't have to go through the inside of the skull. I only painted a few additional supports at the front to improve stability during printing. For the torso, I had to give the supports a little more freedom. There simply wasn't a good way to avoid them completely while keeping the design I wanted. Because of that, you'll need to do a little digging to remove some of the supports hidden inside the torso. But with a bit of patience, **everything is removable**."*

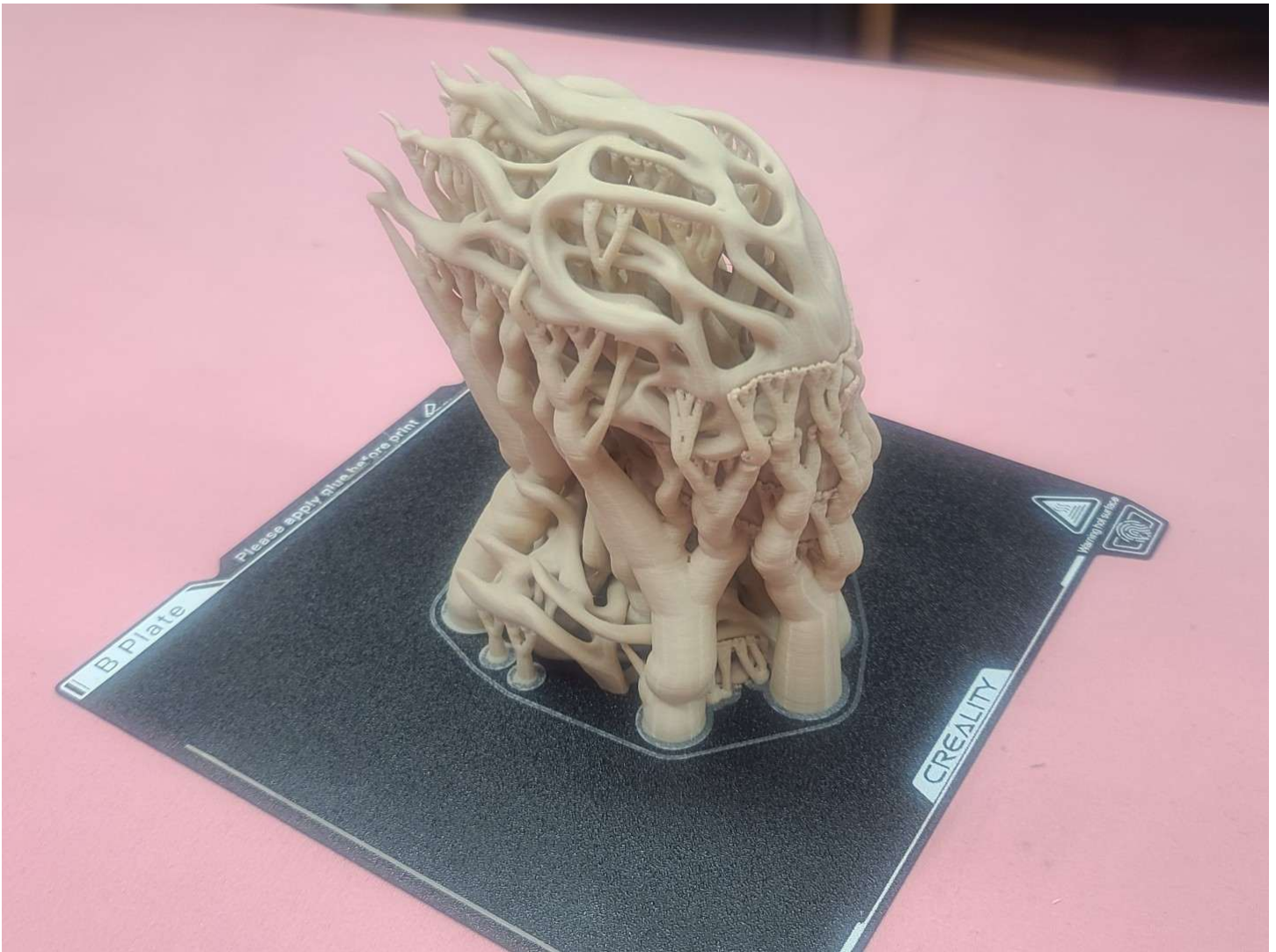
I selected some **Bone White eSun PLA+** filament for this project. As shown in the next image below, which is a screen capture from my Creality Print slicer, the Bonewraith .3mf file is a single plate with a single STL part and printed using a single color. *About as simple as you can get.* I decided to print my model without any changes, which should end up being approximately 96x137x165mm in size.

After reviewing comments made by prior model builders, I established my **"initial slicer profile"** using a 0.4mm nozzle, 0.2mm layer height, 0.42mm layer width, two wall loops using a "Arachne" wall generator with Inner/Outer walls printing order, five top & three bottom shell layers, 5% Lightning sparse infill pattern, at a 60mm/s print speed, two Skirt loops to purge the nozzle, and Tree Supports enabled with a 10 degree threshold angle.

Using this print profile, the total 3D print time will be **14 hrs. 22 min.** requiring 198 grams of filament, of which 86 grams are tree support material.



I fired up my Ender-3 V3, loaded up my spool of **Bone White eSun PLA+** filament, and sent the print file from my Creality Print slicer to the printer. After **14+ hours** of 3D printing, the results can be seen in the next image below.



After spending approx. an hour using snips, knife, needle-nose pliers and tweezers, I carefully removed the 86 grams of tree supports that were intertwined around the flowing bone structure of the 3D model. The last two images below show you my final Bonewraith 3D model. I'm pretty sure Beth will like adding this to her Halloween collection.

