

Fishing Rod "Grizzly"

JH

VIEW IN BROWSER

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Summary

This is a land-based edition of my fishing rod, optimized for casting from the riverbank or shore.

Sports & Outdoor > Outdoor Sports

Tags: hand fishing pocket rod fish device

V2 Design - Please leave comments with feedback how to improve the design!

You may also like my other Design: Fishing Rod - Sharky - optimized for fishing while snorkeling or diving!

→ Also on MakerWorld with files for Bambustudio ←

Fishing Rod “Grizzly” - Your companion on any adventure in the wild!

Fishing Rod “Grizzly” is an redesigned version of my previous “Sharky” design, now optimized specifically for fishing from the riverbank or shore!

While keeping the overall form factor, nearly every component has been redesigned:

- **Larger and Wider Body**: Provides a more secure and comfortable grip.
- **Increased Line Capacity**: The wheel now has significantly more space to hold extra fishing line. As requested, a new version includes 6703 bearings for a much smoother wheeling experience.
- **Enhanced Handle**: Features a print-in-place rotating mechanism, making winding faster and more comfortable.
- **Improved Wheel Design**: Ratcheting teeth are now only on one side, allowing flat edges on both sides of the wheel. Combined with an added cavity in the body for excess line, this greatly reduces the chance of tangling.
- **Stronger Threading**: All threads follow the ISO-M10 standard, making them more robust and compatible with customizable add-ons.
- **Better Clipping Mechanism**: The redesigned body halves now re-open more easily for maintenance or adjustments.
- **Simplified Line Attachment**: The wheel includes a more intuitive spot for attaching the fishing line.
- **Easy Troubleshooting Access**: An opening runs from the wheel to the tip, potentially allowing you to resolve issues without disassembling the entire device.
- **Larger Carabiner Hole**: The body now features a bigger attachment hole, making it compatible with 4mm carabiners for direct clipping.
- **Optimized Axis Design**: All rotating parts have a small inward groove along the cylindrical shapes where the slicer will place the seam. This embeds the seam within the shape's circumference, minimizing interference and ensuring smoother rotation.

V2Improvements (full compatibility with V1 parts):

- More clearance on the **threads**
- Better **bed adhesion** of the handle
- **Rounded edges** of the opening latches

How to print:

⚠ Make sure you have good printbed adhesion and your filament is dry and calibrated correctly ⚠

I recommend using the .3mf files for Prusaslicer. All recommended print settings and modifiers are already set. Otherwise:

- Dimensions of the walls are adapted to **0.4mm Nozzle** size
- **0.2mm Layer height**
- **2 Perimeters & 4 Perimeters for the Handle**

- **15% Infill**
- I recommend using **PLA for both body halves** for increased stiffness and **PETG for the mechanical parts** for increased longevity.

Optional as seen in the pictures: Load the “Printing Modifiers” as modifiers by right-clicking on the corresponding body part → add modifier → load. Add settings “Layers and Perimeters” and “Infill” to the modifier. Set the solid top and bottom layers to 0, perimeters to 0, and the infill to 25% honeycomb pattern.

⚠ **Note:** The handle is a print-in-place design. If you separate the file into individual parts for custom rearrangement, the handle will split into its separate components and you will not be able to reattach them. Reload the handle as single object then (see spare-parts-files). ⚠

How to assemble:

Version with bearings: Push the first 6703 bearing all the way into the wheel. Next, insert the bearing spacer (the thin cylindrical piece). Then, press the second bearing into the wheel as far as it will go. Once both bearings and the spacer are properly seated, you can proceed with the assembly.

Use the pictures for reference!

1. **Attach the Fishing Line**
   Tie your line to the small pillar located inside the wheel. Spool on as much line as needed.
2. **Screw in the Tip**
   Attach the tip by screwing it into the bottom part of the body.
3. **Insert the Lever**
   Place the lever into its designated slot in the bottom body half.
4. **Insert the Wheel**
   Insert the wheel into the body and thread the end of the fishing line through the hole in the tip.
5. **Attach the Top Body Part**
   Clip the top body half onto the bottom half. Make sure the axis of the lever aligns properly with the corresponding hole.
6. **Store the Wheeling Handle**
   Place the rotating handle into the center axis.
   - screwing the handle using the small inner lip might feel a bit awkward, but it's a worthwhile trade-off for the smoother, more comfortable rotation functionality.

How to use:

- **Release the Wheel**
  To release the fishing line, simply push the lever. This disengages the wheel and allows the line to spool freely.
- **Casting Motion**
  Use a smooth throwing motion with the entire device—similar to swinging a stick—and release the trigger (lever) at the right moment to let the line fly.
- **Throwing Distance**
  The heavier the weight at the end of your line, the farther you'll be able to cast. Heavier lures or sinkers help generate more momentum.
- **Practice Makes Perfect**
  Don't worry if your first few casts are awkward or fall short. It takes a bit of practice to get the timing and motion right—but you'll get the hang of it quickly!

Alternatively, you can also try this technique shared by Pixelplanter (thank you very much for sharing!)

> "To cast out put a weight on the line and let about a foot of line. Swing the line in a circle and get it moving quick (like slinging a rock). Press the button when the timing is right and it'll launch up to 20 feet in the water! Super fun once you get the technique down, don't put much line on it and be careful of backlash!"

⚠ You should definitely attach a wrist strap to the small hole on the body. A strong bite could easily yank the rod right out of your hand and we definitely don't want any fish swimming off with a tiny plastic fishing rod! ⚠

Disclaimer:

Know the rules regarding fishing in the region where you are! Not everyone is allowed to fish everywhere. Only keep fish that you know and that are not protected by any laws. Avoid hooking fish that are too small. Please avoid causing unnecessary harm to any animal at all cost!

I hope you enjoy the design! Have fun fishing and please leave a comment with your experience and possible improvement advice. :)

Model files

Normal Version V2 6 files



full-plate.3mf

includes modifiers and print settings - open as project in Prusaslicer



body.3mf

includes modifiers and print settings - open as project in Prusaslicer



mechanical-parts.3mf

includes modifiers and print settings - open as project in Prusaslicer



full-plate-stl.stl



body-stl.stl



mechanial-parts-stl.stl

Version with 6703 bearings V2 6 files



full-plate-6703-bearings.3mf

includes modifiers and print settings - open as project in Prusaslicer



body-6703-bearings.3mf

includes modifiers and print settings - open as project in Prusaslicer



mechanical-parts-6703-bearings.3mf

includes modifiers and print settings - open as project in Prusaslicer



full-plate-stl-6703-bearings.stl



body-stl-6703-bearings.stl



mechanical-parts-stl-6703-bearings.stl



Spare Parts (single files)

9 files



handle.stl



tip.stl



lever.stl



body-top.stl



body-bottom.stl



wheel.stl



body-bottom-6703-bearings.stl



wheel-6703-bearings.stl



spacer-6703-bearings.stl



Printing Modifiers 2 files



modifier-top.stl

☐ load as modifier into the object - placement should be accurate by default



modifier-bottom.stl

load as modifier into the object - placement should be accurate by default

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