

I thought it would be nice to show a better view of the top of the Kinder Land Bridge. I don't have a camera drone (and rules regarding drones are complicated). So I tried this experiment with a long pole, and my old GoPro Hero3 camera. I'm using a "duckfoot push pole" that I bought sometime around 2005 to help if I got stranded in deep water while driving an Argo ATV at Brazos Bend State Park. I've lost the "duck foot" part since then. The pole is aluminum and extends from 6' 4" to 11' 5" long. (1.93m to 3.48m). There are only 2 sections, so it's strong, but a bit heavy when held out at a shallow angle (especially with a bum shoulder). The GoPro is at least 10 years old. It's attached (via 1/4" threads) to a small "UltraPod" plastic folding tripod, which fits into the end of the pole when folded. I think the experiment worked well, so here are more details.



The "UltraPod"-I think they were made by "Pedco", but I've had these for a long time-had the strap torn off, and some of the vinyl feet lost. This allowed it to fit snugly into the top of the pole without any modifications.



The 1/4 -inch threads on the UltraPod accept the mount for the GoPro. As shown, the mount will allow the GoPro to be adjusted to very many angles.



Included are two frames taken from videos filmed with this rig. One is below right, the other is on the next page-top left.





Since the first prototype worked, I wanted to find an alternative that might be longer. There was a selection of extending rods of various lengths listed at two local hardware stores (Lowes, Home Depot). I chose the following because of its compacted length and weight. The far end was threaded for standard home tools, such as cleaning or painting attachments. This one extends to 16' (compared to about 12' for the first prototype).



I bought an inexpensive paint roller handle to use for my camera base. I removed the frame from the handle, then cut a 1/4-20 threaded rod to length (I didn't measure exactly, just assembled and cut as needed). Inside the handle, the rod is secured by a 1/4-20 bushing, while outside, it is secured by two regular 1/4-20 nuts. I've considered using at least one "nylock" style nut but haven't used one yet. I left threads exposed outside of the nuts.



I mounted a jointed camera mount to the threaded rod. Then I threaded the new camera base assembly to the extension rod. The ¼ inch threads on that accept the mount for the GoPro. As shown, the mount will allow the GoPro to be adjusted to very many angles.



If necessary, I could drill and tap the altered handle assembly to accept a grub screw to prevent the handle from unscrewing from the extender. At this time, I don't think it will be needed. I have field-tested the second prototype. The images below show the appearance of the extended unit. As seen in the first image, there is a lot of flexing in the extended unit.



The sequence shows the collapse of the pole at each segment. Extending and collapsing the stick is easy.



This pole is not very heavy, but it is quite flexible and wobbly. This makes it difficult to keep stable. There are some images taken with the GoPro on this stick at a different park on the next page.

The pole was held at an angle, but the camera was still high above the the ground. The flex in the pole can be seen in the images. Although this rig is intended to be used for static shots, or slow-panning shots, the flexibility of the pole can affect the stability of the video. These are frames from video.



I encountered a few minor problems with this rig-mostly loosening of threaded parts on the jointed adaptor-but it is easy to use for a quick shot or two. (August 22, 2024)