Close-Up Wildlife Photography Without Hi-Tech Equipment

Based on this guide and created for educational purposes.

What this guide will help you achieve

If you want to take high-quality, close-as-can-be photographs of insects and animals but the cost of hi-tech equipment has held you back, this guide will show you how you can take the pictures of your dreams without breaking the bank.

This guide uses everyday materials that you probably have lying around the house. The only equipment you need to invest in is a scale loupe—a tool typically used by jewellers—and of course, your digital camera with a retractable lens.

For this hack to work, it's important to ensure that your camera has a retractable lens that can comfortably hold the scale loupe.

NOTE: the magnification of your chosen scale loupe will change how close your final photos look. A scale loupe with a magnification of 7x was used throughout these instructions.

What you'll need

The equipment you need to invest in are listed below:

- A digital camera with a retractable lens.
- A scale loupe that can fit into the diameter of your camera's lens.

Additionally, this guide uses the following common household items:

- A plastic tube that can comfortably fit around the scale loupe, such as the plastic reel found in rolls of tape.
- A 35mm film canister cap or something similar.
- Insulating tape.
- Plastic-safe glue.
- Duct tape.

Close-Up Wildlife Photography Instructions

Step 1: Fit the scale loupe inside the plastic tube and attach the cap.

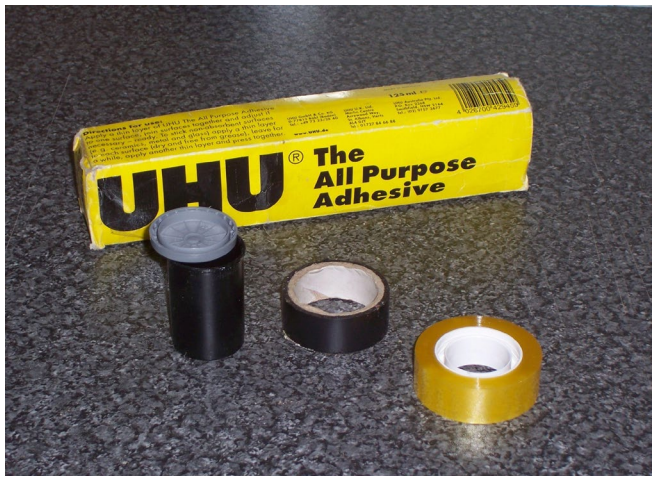


Fig. 1. Glue (top), a grey 35mm film cap (left), black insulating tape (center), and a roll of tape of which the white plastic reel will be used (right).

a.) Begin by fitting your plastic tube around the scale loupe. You can use any kind of plastic tube, including the plastic reel from a roll of tape.

b.) Once you've chosen a tube, the scale loupe should fit comfortably inside the tube. To make sure the loupe doesn't fall out, wrap the inside of your tube with insulating tape.

c.) To finish off, insert the scale loupe back inside the tube with the insulating tape.

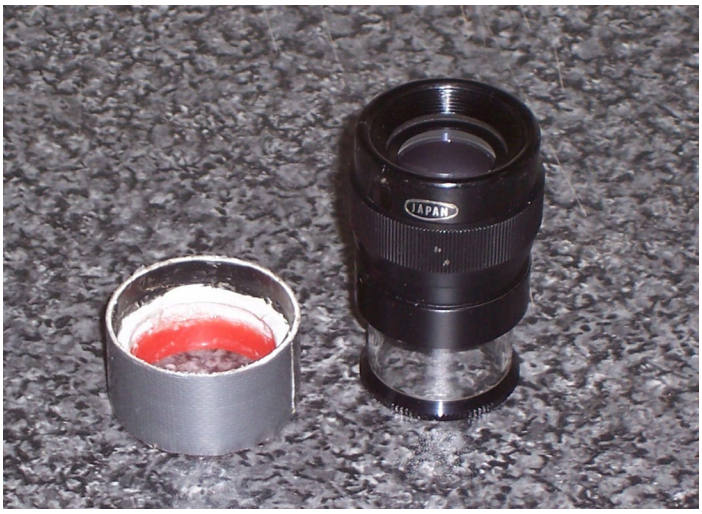


Fig. 2 A plastic tape reel (left) covered in duct tape that has been made to fit the scale loupe (right) with a few inner layers of insulating tape. The plastic red ring is a cored-out 35mm film canister cap.

Step 2: Attach your plastic cap to the tube and the camera lens.

Attach your chosen cap of choice to the lens. In this example, a 35mm film canister has had its center cut out; it will be used to hold the tube to the camera lens. Any similar small piece of plastic with an opening for the scale loupe can be used.

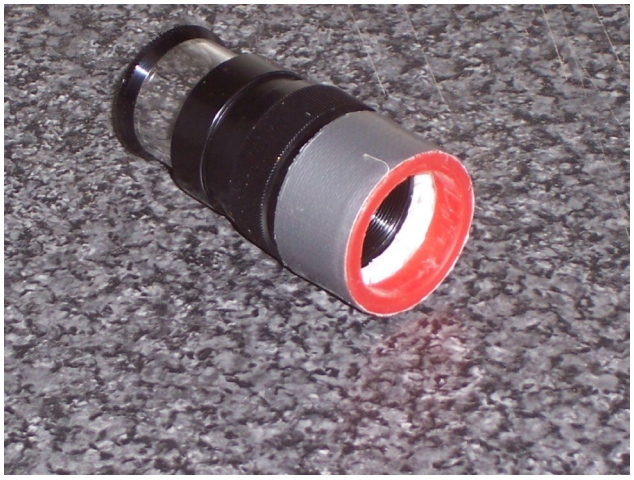
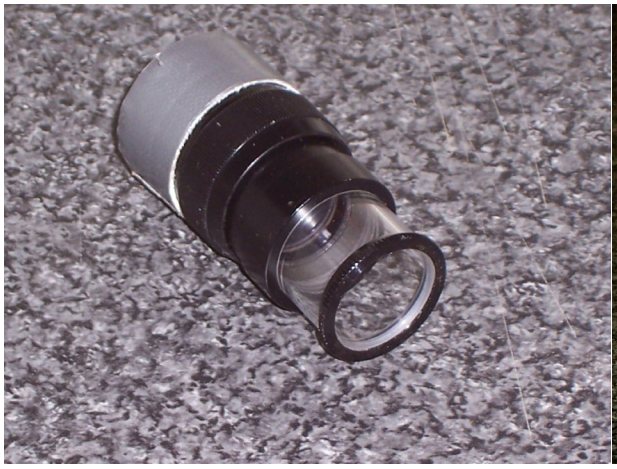


Fig. 3. Scale loupe fitted with plastic tube and lens.

Step 3: Glue the cored-out cap to the plastic tube and wrap it with duct tape.

After cutting out the center of your cap, use a plastic-safe glue to hold the cap to the tube.

Tip. You can wrap the combination cap and tube with duct tape for a cleaner look.



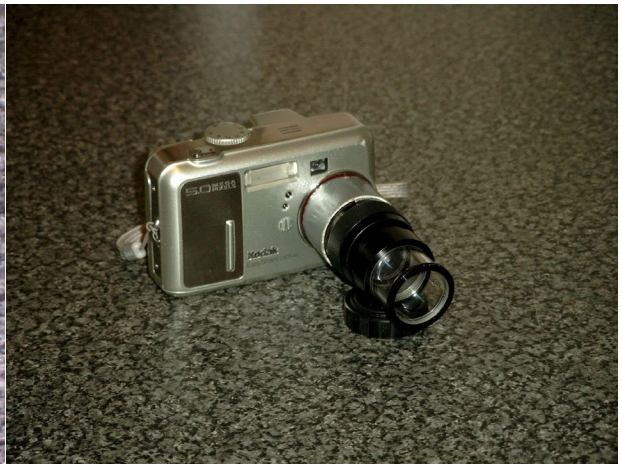


Fig. 4. The plastic tube as it appears on the scale loupe (left). Fig. 5. The final product on the digital camera (right).

Step 4 Adjust the depth of field on your camera.

The depth of field of your final photos depends on both the magnification of your scale loupe and your camera's settings.

If it’s difficult to focus your field of vision due to using the loupe, focus the loupe on a small object—such as a small piece of paper or jewelry—and the camera’s autofocus should adjust itself.

The nature of the scale loupe requires you to be up close and personal with your subject, but the final photos make it all worth it.

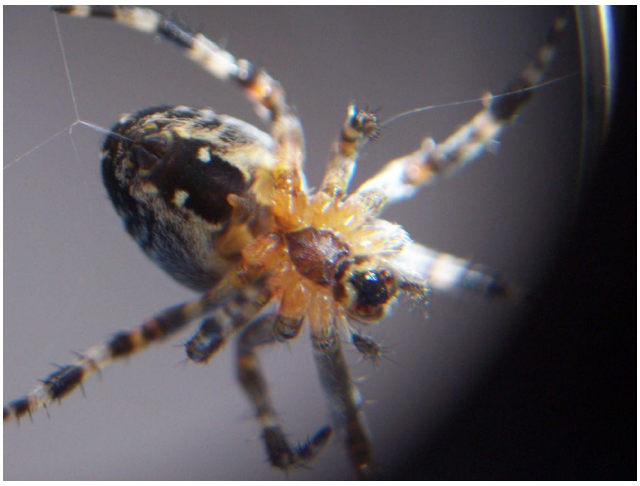


Fig. 5. Example picture of a spider taken with the scale loupe camera attachment.

Modifications for the scale loupe camera attachment.

A more powerful loupe can drastically change how in-depth your final photos look. A scale loupe with a 7x magnification can deliver great results. But scale loupes of 10x or 15x magnification deliver even greater results, making your chosen subject look more detailed.

Experiment with different magnifications to see what kind of results you can get.

You may also consider adding a remote lighting trigger to your scale loupe camera attachment. This modification can help adjust darkness or blurriness resulting from being very close to the subject.