

ALL LIVE ANIMALS

Project Meeting

Parasitology



EXTENSION

Designed by E. Riske, Dec. 2024

AGES

Intermediate & Senior

TIME

1.5 to 2.5 hours

COST

\$\$ - \$\$\$\$

SKILLS GAINED

Microscopy
Laboratory
Critical Thinking
Problem Solving
Attention to Detail
Collaboration
Communication
Time Management
Organization
Ethics
Safety
Hygiene

THINGS TO BRING

Notebook
Pencils

WHAT IS PARASITOLOGY?

Parasitology is the branch of veterinary medicine that is interested in the study of parasites. Both internal and external. Many parasites exist and play an important role in raising animals as pets and as livestock.

What is a fecal float?

A Fecal Float is a technique that both veterinarians and lab technicians use to identify internal parasites such as worms. Fecal floats utilize a special solution, feces (poop), and a microscope to see if the eggs of the worms are present. Not finding eggs doesn't mean that the animal is free of internal parasites, it just means you didn't find eggs.

SUPPLIES

Feces
Goggles
Nitrile gloves
Lab Coat or Overshirt
Lysol Wipes
Microscope
Items on Amazon List:

Note: The Fecal Kits on the amazon list can be substituted for test tubs and stir sticks



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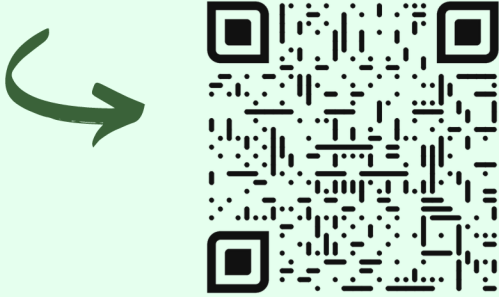
Step-by-Step Instructions



EXTENSION

**DID YOU LIKE THIS
PROJECT?
SHARE YOUR
THOUGHTS WITH US!**

YOUTH



Do you have an idea for a
project meeting?

Have you done a project at a
meeting that you would like to
share?

Fill out our quick form to share
it with us!



DISCUSSION TOPICS:

Every group of participants will have different interests or questions, however, below is a starter list of discussion starters:

- What happens when an animal has parasites?
- How do parasites get into animals?
- Are all parasites inside animals?
- What are some parasites you've heard of before?
- Can humans get parasites from our animals?
- Are there any parasites you can see without a microscope?
- Are mosquitoes parasites?

ACTIVITIES BESIDES THE MICROSCOPE:

Have a group that wants to learn about parasites but you don't have the resources to do the full lesson plan?

- Create your own parasite
 - Draw or use clay to recreate a real parasite or make one up talking about what it can do
- Parasite Detective
 - Provide symptoms of an "infected animal" and have participants work through what parasite it could be!

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Step-by-Step Instructions

1

Hygiene: Put on your gloves, lab coat or overshirt and eye protection

2

Prepare fecal sample: Using the green insert from the fecal float kit, fill the bottom portion with feces (about the size of a pea or two)



3

Mix in solution: Fill the fecal float kit half way with the solution. Twisting and agitating the green insert over the white notches in the bottom. Once mixed well, fill with the solution until a meniscus is formed.

4

Place cover slip: Once a meniscus is formed, place a coverslip on top of the fecal float kit. Let it sit for about 20 minutes. (if using a salt solution, about 15 minutes)

5

Prepare slide: With gloves, carefully pick up the coverslip and place onto a clean slide (wet side against the slide).

6

Examination: Using the microscope, search for eggs starting at the lowest setting and then working your way up. It may be necessary to adjust the light used as there isn't any stain used on these. Don't forget to remove gloves prior to touching the microscope!

7

Clean up: Carefully dispose of your samples, coverslips, and either wash or dispose of slides. Sanitize surfaces. Remove lab coats/ overshirts to wash. Remove gloves. Don't forget to wash your hands after removing your gloves!

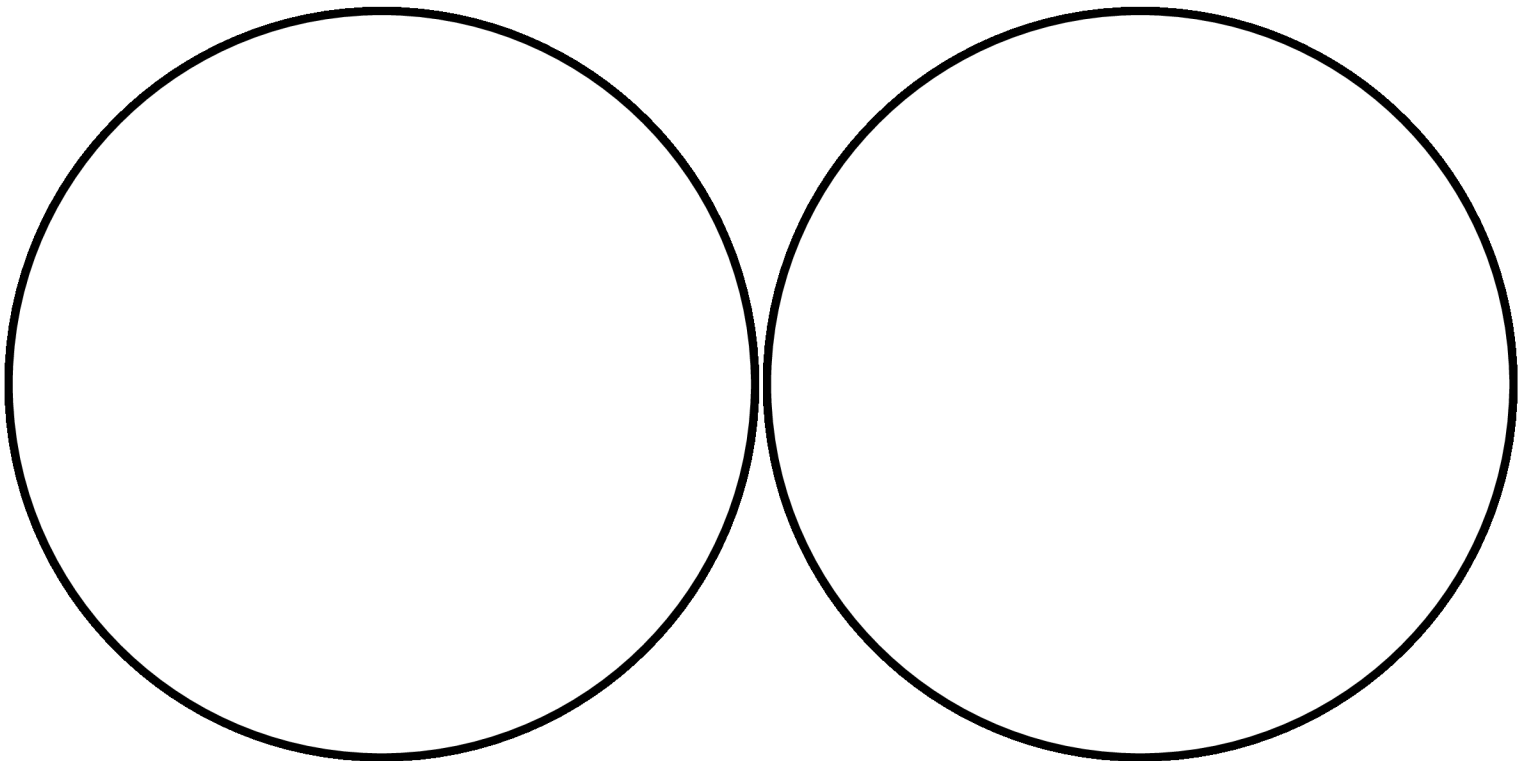


Taking Notes:

Just like it is important to take notes in school to remember what you learned, it is important to take notes of what you saw. Pictures with your cell phone can also be helpful. Especially if you are in a large group, it may be easier to discuss what everyone saw at the end of the meeting.

Draw what you see:

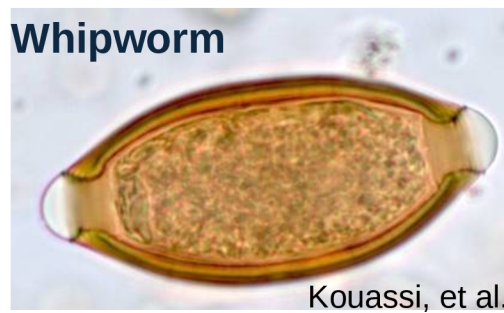
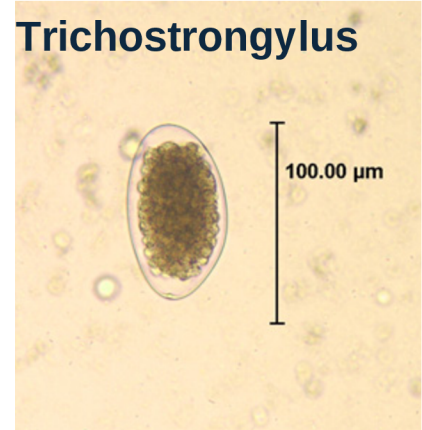
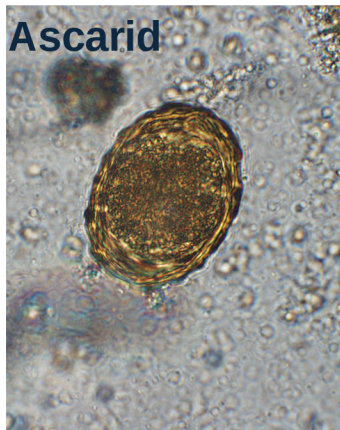
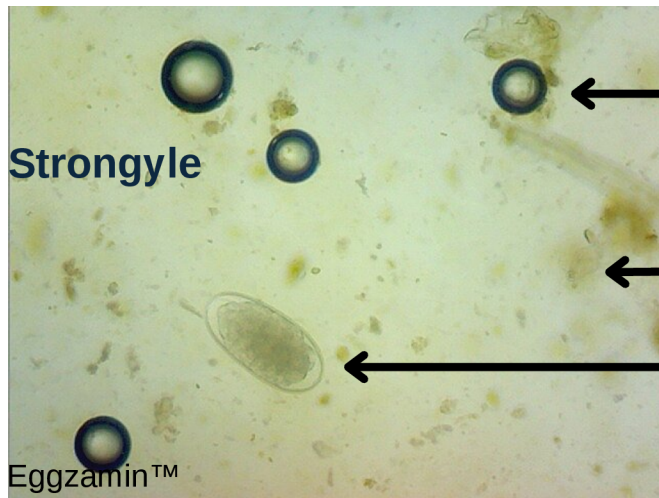
Try to find the same thing at two different power settings and draw it at both:



Power: _____

Power: _____

What am I looking at?



Plant Matter:

