

Equine Parasites

Medina 4-H Hippology

Gwyn Andrews

January 23, 2019

Terms

- Parasite: organism that lives on and feeds from another organism
- Host: organism that a parasite lives and feeds off of
- Larva: life stage of insect or worm, between the egg hatching and adult stage
- Refugia: Proportion of parasite population that's not exposed to a given drug at time of treatment

General symptoms

- Dull, rough hair coat
- Lethargy or depression
- Decreased stamina
- Loss of condition
- Slow growth
- Pot belly (young)
- Colic
- Diarrhea

Management

- Fecal egg counts (FEC)- examining fresh manure under microscope to count eggs
- Less than 200 eggs per gram (EPG) is a light parasite load
- 500-1000 EPG means that the time between dewormers is too long
- What does **negative** mean?

“Eggs are not present” vs. “there is no evidence that eggs are present” (could still have eggs)

Why? ... eggs are produced intermittently

Anthelmintics

- None are 100% effective for all parasites
- Resistance
 - Greater concern in recent years
 - Important to test the efficacy of dewormers routinely
- Program- no universal
 - Depends on number of horses, age of horses, pasture management, geography
 - Monitor with FEC

Burrow into intestine lining and remain dormant for several months



Left: from Bimeda Equine website

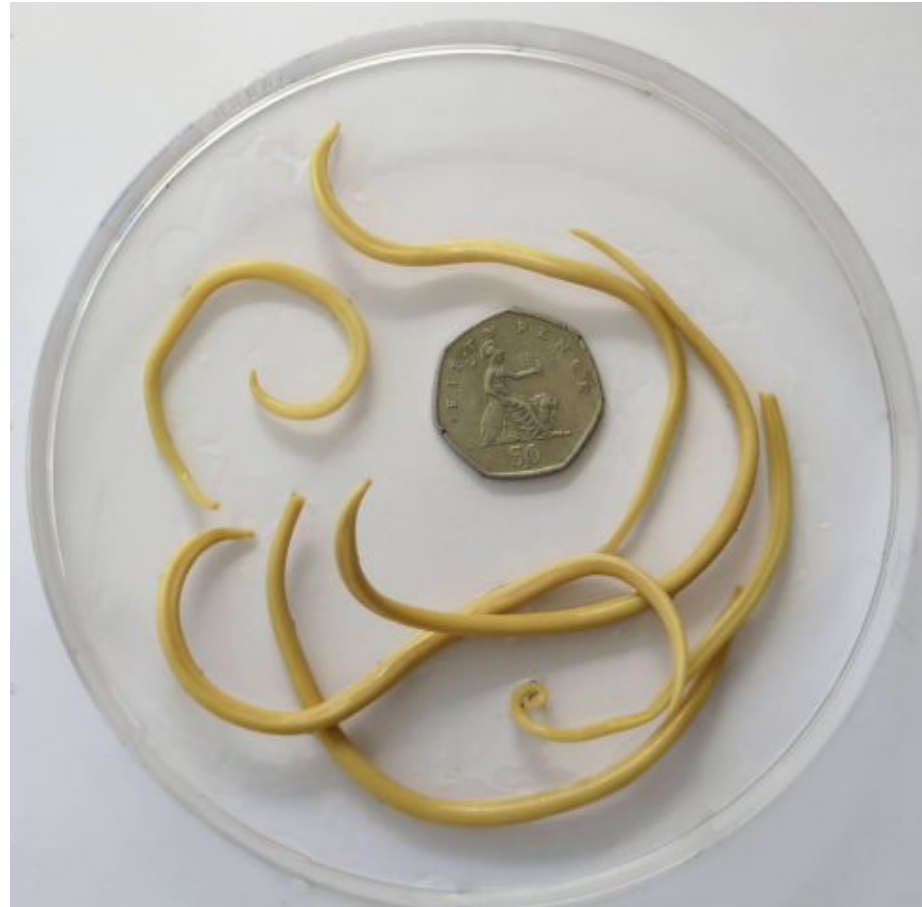
Right: from Pedernales Veterinary Center website

Small strongyles

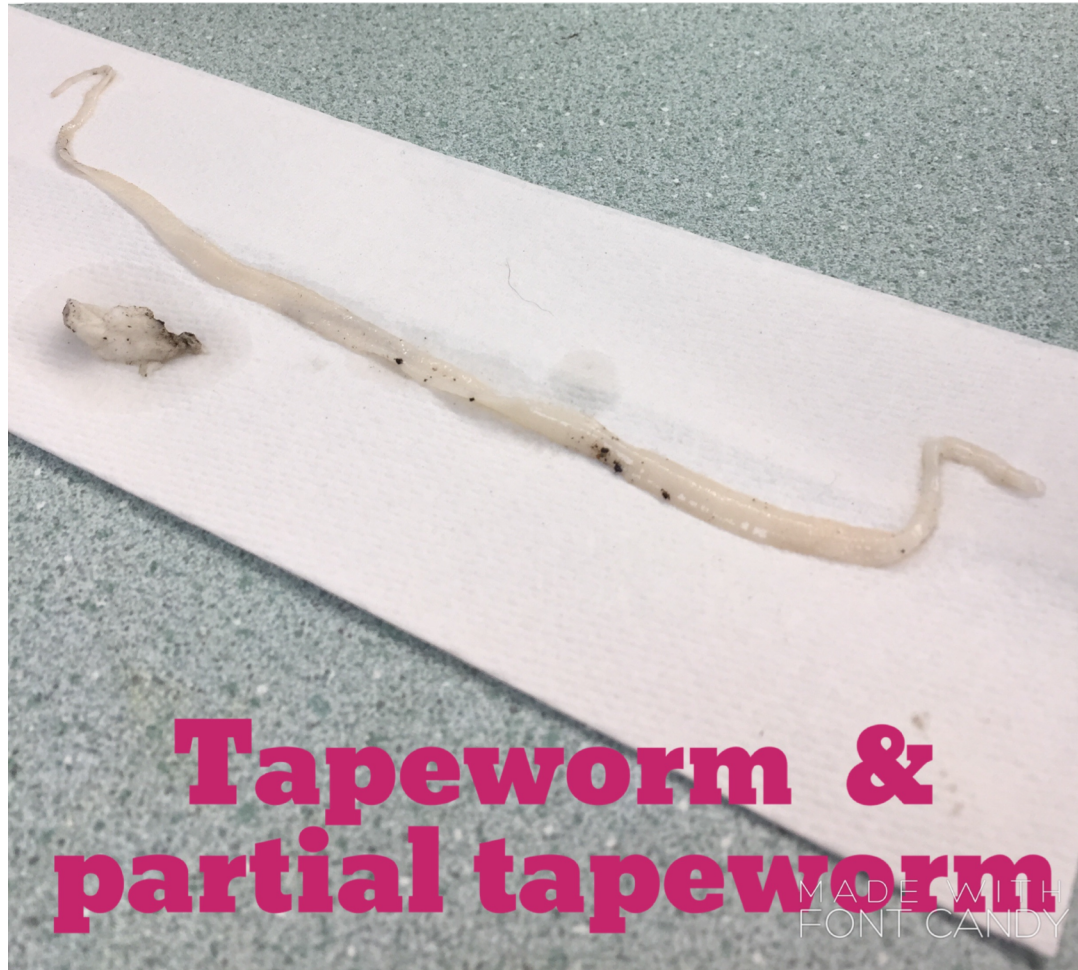
Move through internal organs and into lungs where they get coughed up and re-consumed

Right: from Bimeda Equine website

Ascarid/Roundworm



Uses pasture mite as host; horse eats mite and then may become infected



Left: found in fecal sample of a puppy
Right: picture from Wikipedia.com
“*Anaplocephala perfoliata*”

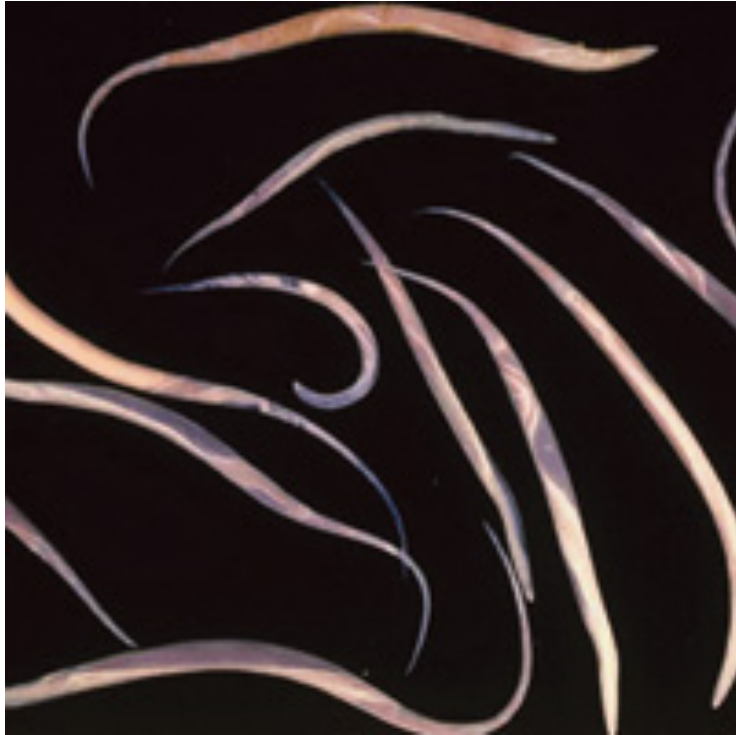
Effectively controlled by most available dewormers

Large strongyles

Right: from Bimeda Equine website



Horse rubs tail on door or wall; tail appears ratty at top



Pinworms



Right: from Bimeda Equine website

Left: Zoetis website

Can damage lining of stomach and cause
ulceration in mouth



Left: larvae from Veterinary Practice News website
Right: from Bugguide.net

Bots

Can develop without fertilization by
parthenogenesis



Threadworm



Right: from Equiderma website

Left: from The Horse's Back website

Most common symptom of this parasite is summer sores



Left: from Peterson & Smith Vet Hospital Website

Right: from Practical Horseman website



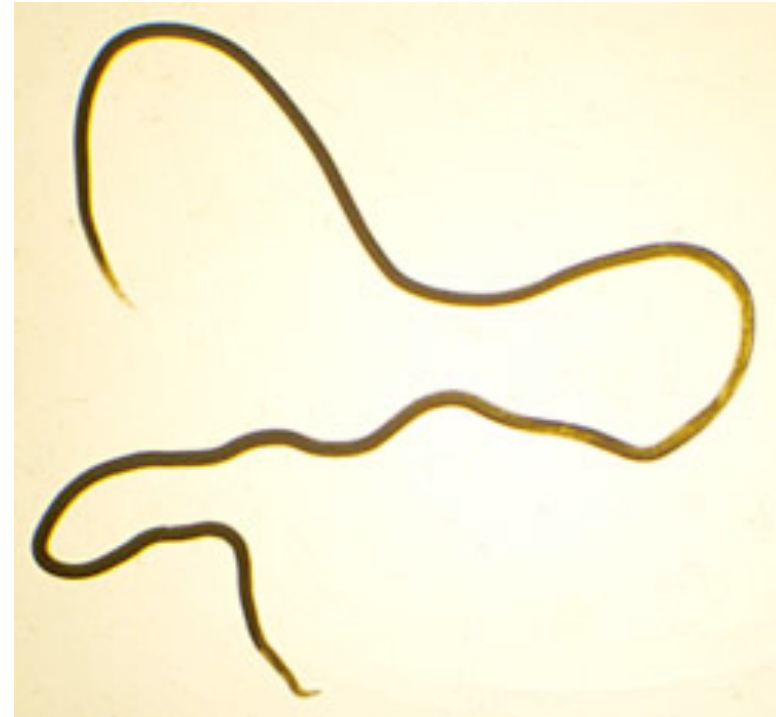
Stomach worm

Can cause parasitic pneumonia & bronchitis



Left: from Veterinary
Expert website

Right: from Cornell
Mushroom blog



Lungworm

Common in horses found near cattle or other ruminants



Left: from University of Kentucky website

Right: from Texas A & M Citybugs website



Hairworm

Likes horse's legs and flanks



Stable fly

Image from Entomology Today website

Deposits vomit and fecal droplets upon landing



House fly

Image from University of Nebraska Entomology Dept.

Cause painful bites and lap up blood from wounds



© MATT BERTONE 2014

Deer fly

Image from NC State Extension website

Transfer Equine Infectious Anemia (EIA)



Horse fly

Image from Texas A & M Entomology Dept.

“punkies” or “no-see-ums”; horses can have allergic reaction called Sweet Itch



Biting midge

Left: from Purdue University Extension

Right: from University of Florida Entomology Dept.

Likes horse's legs and flanks



Horn fly

Image from Texas A & M
Entomology Dept.

Called “buffalo gnats,” prefer
inside the ears



Black fly

Image from Purdue University
Extension

Sources

Caroll, Juliette. "Equine Parasite Control." *Pedernales Veterinary Center Equine Parasite Control Comments*,
pedernalesveterinarycenter.com/equine/equine-parasite-control-guidelines/.

"Don't Bug Me." *Horse Smarts: An Equine Reference & Youth Activity Guide*, American Youth Horse Council, 2017, pp. 32–1-320–28.

"Internal Parasites: Strategies for Effective Parasite Control | AAEP." *Home*,
aaep.org/horsehealth/internal-parasites-strategies-effective-parasite-control.

"Larva." *Dictionary of Medical Terms*, by P. H. Collin, A & C Black, 2005, p. 217.

"The Inside Story." *Horse Smarts: An Equine Reference & Youth Activity Guide*, American Youth Horse Council, 2017, pp. 325–1-325–29.

Picture Sources

<https://www.bimedaequine.com/disease-information/parasites/small-strongyles>

<https://www.bimedaequine.com/disease-information/parasites/large-strongyles>

<https://www.bimedaequine.com/disease-information/parasites/large-roundworms>

<https://www.bimedaequine.com/disease-information/parasites/pinworms>

<https://bugguide.net/node/view/852290>

https://www.zoetis.co.uk/conditions/pages/wormcontrol/parasites_pinworm.aspx

<https://citybugs.tamu.edu/factsheets/landscape/others/ent-1001/>

Picture Sources

<https://www.farmersweekly.co.za/animals/horses/are-worms-troubling-your-horse/>

<https://www.equiderma.com/pages/neck-threadworm>

<https://thehorsesback.com/neck-threadworms/>

<https://practicalhorsemanmag.com/health-archive/summer-sores-28596>

<https://www.petersonsmith.com/what-are-summer-sores-2/>

<https://blog.mycology.cornell.edu/2006/12/14/pilobolus-and-the-lungworm/>

<http://www.theveterinaryexpert.com/pests-and-parasites/lungworm/>

<https://entomology.ca.uky.edu/ef613>

Picture Sources

<https://entomologytoday.org/2017/06/12/could-catnip-or-chrysanthemum-bring-cows-relief-from-biting-flies/stable-fly-2/>

[http://entnemdept.ufl.edu/creatures/urban/flies/house fly.HTM](http://entnemdept.ufl.edu/creatures/urban/flies/house_fly.HTM)

<https://entomology.ces.ncsu.edu/2016/06/deer-flies-hunting-for-a-meal/>

https://entomology.tamu.edu/studylist_all/horse-fly/

https://entomology.tamu.edu/studylist_all/horn-fly/

<https://extension.entm.purdue.edu/publichealth/insects/blackfly.html>

<https://extension.entm.purdue.edu/publichealth/insects/bitingmidge.html>