

New Hampshire Hippology Contest  
Hippology Team Problem  
Natural Parasite Control

County \_\_\_\_\_

Team Member Names: \_\_\_\_\_ Numbers: \_\_\_\_\_

New owners have purchased the farm where your 4-H club meets. The new owners recognize the importance of preventative health care and parasite control, however, they also feels that the minimum amount of chemicals should to be used on their horses to avoid damaging the environment and prevent resistance to chemicals.

They have asked your group of senior 4-H members to help them with a parasite control program targeting both internal and external parasites for their personal herd of 5 adult quarter horse mares and geldings that are used for pleasure and trail riding, and are shown locally. There are no other horses stabled at the farm, however, friends and 4-H members regularly bring their horses to the facility to use the riding facilities.

**YOUR TASK:**

Plan a program for internal and external parasite control that:

- uses the greatest amount of natural parasite control and good management practices
- and a minimum amount of chemical deworming products
- and reduces the population of flies and other external parasites with a minimum of chemicals

**You have 10 minutes total** (preparation AND presentation)

| Scoring:                   | possible points | team score |
|----------------------------|-----------------|------------|
| Accuracy and completeness  | 25              | ___        |
| Organization               | 5               | ___        |
| Presentation               | 5               | ___        |
| Questions                  | 5               | ___        |
| Time management            | 5               | ___        |
| Teamwork and participation | <u>5</u>        | ___        |
| Total                      | 50              | ___        |

**Hippology Team Problem**  
**Natural Parasite Control**  
**ANSWERS**

**Sources:**      Lewis pages 159 – 164                      HIH Section 415 & 430  
                      Evans pages 644 – 650                      Controlling Parasites Fact Sheet

**Strategies for internal parasite control**

- Regular fecal egg counts
- Consult veterinarian for advice and to develop a schedule for fecal egg counts and dewormer use
- Removal of manure from turn-out areas not less than weekly (may be less often in below freezing weather)
- Raking and rotation of pastures and paddocks
- Prevention of transmission at shows by minimizing grazing in contaminated areas
- Do not allow visiting horses (or their manure) in the pasture/feeding areas.
- Use chemical dewormers in rotation at correct dose when indicated by fecal egg count
- Avoid feeding from the ground
- Spread only composted aged manure on pastures
- Avoid overgrazing
- When using chemical dewormers, treat all horses on the same day
- Rate of incidence of internal parasites is lower in tie stalls than box stalls

**Strategies for external parasite control**

- Eliminate standing or slow moving water from the farm by removing all objects in which rain water can collect (unused buckets, old tires, tarps, depressions in jumps, etc)
- Change water in outside buckets and troughs no less than every 48 hours
- Minimize manure piles and other rotting organic matter by hauling manure away, composting it, or covering manure piles. Also rake up spilled hay and feed and other fly breeding areas (in addition to picking up manure as mentioned in internal parasite strategies)
- Do not share grooming tools, blankets, or other equipment with visiting horses to reduce the chance of transmission of fungi, mites or lice
- Improve drainage to reduce or eliminate muddy areas
- Use fly sheets, bonnets, and wraps on horses to reduce need for repellants
- Use fly predators (parasitic wasps)
- Use natural fly repellants that do not use chemicals
- Provide shelters (run-in sheds) where horses can take shelter from flies
- Use natural fly traps

Teams do not need to mention EVERY strategy listed above, and may mention strategies not listed above as long as accurate (consult official sources if in doubt). **2.5 points** should be given for each accurate item, up to a maximum of **25 points** for the accuracy and completeness portion of the score.