The climate and the region will determine the grazing period and will affect the parasite’s life cycle — and identify if transmission is seasonal or year-round.

“When the grass turns brown, it’s time for a larvicidal treatment.”

The timing of the optimal program can be scheduled on these key elements.

- Larvicidal treatment with the PANACUR® POWERPAC for any new, incoming horse
- Use the PANACUR® POWERPAC as needed once or twice a year thereafter.
- Traditional presentations of PANACUR® may be incorporated during the grazing season for routine deworming needs.

The optimal worm control program is a flexible model based on parasite life cycles and climates. Since weather conditions can vary (e.g., drought), and because the map shown is not a definitive segmentation of the geographic regions, veterinary consultation is always necessary for design of individual programs.
PANACUR® POWERPAC — Proven Effective

- Dosage: 10 mg/kg PO s.i.d. x 5 consecutive days* the PANACUR® POWERPAC has a high degree of efficacy against all stages of small strongyles.

- The PANACUR® POWERPAC is the only FDA-approved method of larvicidal treatment for encysted EL₃’s and L₃/L₄’s.

- Studies show the PANACUR® POWERPAC is 98% effective in killing hypobiotic encysted EL₃’s.

- PANACUR® POWERPAC also effectively controls arteritis caused by 4th stage larvae of Strongylus vulgaris, as well as large strongyles (Strongylus edentatus, S. equinus, S. vulgaris), pinworms (Oxyuris equi) and ascarids (Parascaris equorum).

*PANACUR® POWERPAC offers a complete course of treatment for a 1250 lb. horse.

PANACUR® (fenbendazole) — Proven Safe

- PANACUR® has long been recognized for its excellent safety profile in horses.

- PANACUR® is proven safe, with no adverse effects even after single doses as high as 1,000 mg/kg and doses as high as 50 mg/kg for up to 15 consecutive days.

- PANACUR® is also safe for use in foals and pregnant mares.

PRECAUTIONS:
- Side effects associated with PANACUR® (fenbendazole) Paste 10% could not be established in well-controlled safety studies in horses with single doses as high as 434 mg/kg (1000 mg/kg) and 15 consecutive daily doses of 25.7 mg/kg (56 mg/kg). Particularly with higher doses, the lethal action of fenbendazole may cause the release of antigens by the dying parasites. This phenomenon may result in either a local or systemic hypersensitivity reaction. As with any drug, these reactions should be treated symptomatically.

PANACUR® (fenbendazole) Paste 10% has been evaluated for safety in pregnant mares during all stages of gestation with doses as high as 11.4 mg/kg (25 mg/kg) and in stallions with doses as high as 11.4 mg/kg (25 mg/kg). No adverse effects on reproduction were detected. The recommended dose for control of 4th stage larvae of Strongylus vulgaris, 4.6 mg/kg (10 mg/kg) daily for five consecutive days, has not been evaluated for safety in stallions or pregnant mares.

Migrant Enteric Parasites: Regular dosing at intervals of six to eight weeks may be required due to the possibility of reinfestation.

Migrating Enteric Parasites: In the case of 4th stage larvae of Strongylus vulgaris treatment and retreatment should be based on the life cycle and the epidemiology. Treatment should be initiated in the spring and repeated at the end of a six-month interval.

Optimum Deworming Program for Control of S. vulgaris: optimum reduction of S. vulgaris infections is achieved by reducing the infective load of the parasites. When horses are running on pasture, in temperate North America, maximum pasture infectivity occurs in October/November. If horses are removed from those pastures in January, pasture infectivity will decline to zero by July 1. Egg production of S. vulgaris is maximal from January through April, peaking in August and declining to minimal in December.

Recommended Deworming Programs: **
- December 1, February 1, April 1, June 1, August 1, October 1.

The two treatments which are in bold type are the recommended periods when the 5-day treatment regimen for the control of the migrating larvae of S. vulgaris should be performed.

** For other areas in the world, retreatment periods for the migrating larval of S. vulgaris may be different. Consult your veterinarian.

CAUTIONS: Keep this and all medications out of the reach of children.

When using PANACUR® (fenbendazole) Paste 10% concurrently with trichlorfon, refer to the manufacturer’s label for use and cautions for trichlorfon.

WARNING: Do not use in horses intended for food.

Dosage: PANACUR® (fenbendazole) Paste 10% is administered orally at a rate of 2.3 mg/lb (5 mg/kg) for the control of large strongyles, small strongyles, and pinworms. One syringe will deworm a 2500 lb. horse. For horses weighing less than 18 months, the recommended dose is 4.6 mg/kg (10 mg/kg). One syringe will deworm a 1250 lb. horse. For control of encysted early third stage (hypoderma), late third stage and fourth stage cyathostomes larve and fourth stage larve of oxyuris vulgaris the recommended dose is 4.6 mg/lb (10 mg/kg) daily for 5 consecutive days; administer one syringe for each 1250 lbs. horse weight per day.

SEE PRECAUTIONS FOR RETREATMENT RECOMMENDATIONS

DIRECTIONS FOR USE:
- 1. Determine the weight of the horse. 2. Remove syringe tip. 3. Turn the dial ring until the edge of the ring nearest the lip lines up with zero. 4. Depress plunger to advance paste to tip. 5. Now set the dial ring at the graduation nearest the weight of the horse (do not undersize). 6. Horse’s mouth must be free of food. 7. Insert needle of syringe through the intermaxillary space and deliver the paste on the back of the tongue by depressing the plunger.

Product Code Number: PAN-171-5761
Supplied: 3 x 57 g pac.
Shelf at room temperature

800-835-0541
www.gidde-up.com
LARVAL CYATHOSTOMOSIS

ACUTE CLINICAL SIGNS

Listlessness, Weakness
Anorexia
Recurring Colic
Diarrhea
Weight Loss
Peripheral Edema
Death in Severe Cases

Even in lesser numbers, the damage caused as encysted small strongyles synchronously emerge from mucosal cysts in the intestinal lining can reduce the ability to absorb nutrients, impacting health and performance.

SUBCLINICAL SIGNS

Decreased Performance
Poor Feed Utilization
Dull Hair Coat
Unthriftiness
“ Ain’t Doin’ Right”

Hypobiosis can occur when survival conditions are unfavorable. However, larvae resume development with moderate temperatures and greener grass. Then, large numbers of larvae excyst en masse. This can involve thousands to millions of larvae exploding out of the gut wall, causing severe damage to the intestinal mucosa.
CONTROL OF SMALL STRONGYLES

In northern temperate zones of the United States, the occurrence of larval cyathostomosis is typically between March and May. At any point during this time, a mixed population of hypobiotic encysted EL3 and developing LL3/L4 stages can be found in the intestinal wall, along with adult worms in the lumen of the intestine. That's why it's so important to use the PANACUR® POWERPAC, which has activity against all stages of small strongyles and successfully controls larval cyathostomosis.

• Studies in Illinois, Louisiana and Tennessee, all using the same protocol, showed larvicidal treatment with the PANACUR® POWERPAC provided a 98% reduction of encysted EL3 larvae, and as great as a 96% reduction in LL3/L4. (DiPietro, Klei, Reimermeyer – 1997)

• Studies showed that ivermectin at the labeled dose (0.2 mg/kg), and at five times the labeled dose, has limited effect (0 to 42%) on mucosal larvae EL3's and LL3/L4. (Klei – 1993/Lyons – 1994)

• Moxidectin (Quest) was found to be effective against luminal larvae (L4) and adult strongyles (L5), but delivered marginal results against inhibited EL3 larvae. (DiPietro – 1992/Bello – 1994)
THE LIFE CYCLE OF SMALL STRONGYLES

- Adult small strongyles lay eggs, which pass in the feces
- Eggs hatch and develop into third stage larvae (L₃)
- L₃'s are ingested with grass
- L₃'s penetrate the intestinal lining in as little as 6 hours
- L₃'s encyst and become early third stage larvae (EL₃)
- Many encysted EL₃'s become hypobiotic (hypobiosis can last as long as 3 years)
- Some EL₃'s will evolve into late third stage (LL₃) and on to fourth stage (L₄), excysting to the adult stage

EL₃ STAGE — 75% OF THE PROBLEM

This transillumination of the large intestinal mucosa clearly shows that EL₃ larvae dominate the intestinal lining, while LL₃/L₄'s represent a much smaller percentage of the worm burden.
PANACUR® POWERPAC
Larvicidal Treatment

The only way to fight the big problem
of encysted small strongyles

SMALL STRONGYLES
ARE THE #1 PARASITE
PROBLEM IN HORSES

As common intestinal parasites, such as Strongylus vulgaris, are being effectively controlled by the routine use of anthelmintics, a new problem is emerging. Today, parasitologists consider cyathostomes (small strongyles) to be the #1 nematode problem of horses. In fact, small strongyles can account for up to 90% of the horse's total worm burden. Larval cyathostomosis, the disease caused by this group of helminths, can cause severe clinical signs and even death in extreme cases.

THE ENCRYPTED EL₃ STAGE
IS 75% OF THE PROBLEM

Controlled efficacy studies show that up to 75% of encysted small strongyles are early third stage larvae, EL₃'s, which can remain hypobiotic for up to three years.¹ These EL₃'s must be eliminated to prevent the detrimental effects of acute and subclinical larval cyathostomosis.

Products, like Quest™, that reduce only the number of LL₃'s/L₄'s offer little improvement over routine dewormers; and another product, Strongid® C 2X, actually recommends a larvicidal treatment before its use.