HB Test Outline

(to be used in conjunction with HB Standards and the Pony Club Manuals)

Action of bits: (D pp.250-253)

Snaffle - works by **direct pressure** on tongue, lips and bars.

Curb - works by **leverage**, so multiplies the pressure. Squeezes the mouth between the bit and the curb chain.

Pelham - a **double-action** bit; top rein acts as a snaffle, while bottom rein acts like a curb.

Conformation (C pp.316-324)

Know the good and bad points of *your* horse's conformation. Consider the following:

Good qualities: (D p.243)

- short **back**
- long, arched **neck**
- large, kind **eyes**
- long, sloping **shoulder** (45° angle)
- **pasterns** with medium length and slope (45° angle)
- short **cannon bones**
- **front legs** are straight and parallel
- "clean" joints with clearly defined tendons.
- good-sized **foot** with large frog.

Bad - Puffy joints. "Tied-in" tendons below the knees. Long cannons. Pasterns are too short and straight or too long and flat. Long, sway back. Bull neck or ewe neck. Upright shoulder. Pig eyes. Too-sloped croup. Crooked legs. Feet too small; heels too narrow.

Causes of Blemishes & Unsoundnesses:

Study "conformation > unsoundnesses" (C pp.325-329; 332-334 & *Quiz* Conformation Outline)

- Bowed tendon - back at the knee; long, flat pasterns; long toes w/ low heels; tied-in.
- Ringbone - short, upright **pasterns**; crooked **legs**, inc. toes in, toes out or base wide.
- Sidebone - short, upright **pasterns**; large, heavy horses with big feet especially prone.
- Navicular - small feet, narrow heels, upright pasterns, long toes w/ low heels.
- Curb - **sickle** hocks especially; also CBS.
- Thoroughpin - **sickle** hocks; also bowed and cow hocks (CBS)
- Bog spavin - **straight**; also bowed, cow and sickle hocks (CBS)
- Bone spavin - straight, bowed, cow hocks (CBS)
- Splint - bench or knock **knees**

Movement Problems Caused by Conformation Faults:

- Brushing - base narrow
- Overreaching - very short back with long legs; long toes.
- Forging - very short back with long legs; long toes.
- Paddling - toes in
- Winging - toes out
- Interfering - toes out or base narrow

Conformation (con't)

Unsoundnesses - (C pp.325-331)

Ringbone - bony lump on the **pastern** caused by arthritis in the joint. Can be high (between the long and short pastern bones) or low (between the short pastern bone and the coffin bone); the latter is worse.

Curb - lump on the **back of the hind leg** just below the hock. A sprain of the plantar ligament. Blemish after it heals.

Bowed tendon - thickening of the tendon **behind the cannon bone**. Tear of the tendons.

Sidebone - hardening of cartilages of the **bulbs of the heels.**

Spavins - in the **hock**.

- Bone spavin - a bony lump on the **inside** of the hock. Arthritis of the hock
- Bog spavin - a soft swelling on the **front** of the hock. Blemish.

Navicular - inflammation of the navicular bone, navicular bursa and/or the end of deep flexor tendon inside the **hoof**.

Splint - bony lump on the splint bone on the **inside of the front leg, under the knee**. Blemish after it heals.

Thoroughpin - soft swelling in the upper part of the **hock**. Usually just a blemish.

Sprains - occur in the **suspensory** ligaments that run down the **side of the leg** between the cannon bone and the flexor **tendons** at the back of the leg.

Foot & Shoeing - (C p.259)

Know type and size of shoes on *your* horse and why they are used. Talk to your blacksmith. Most blacksmiths use "keg" shoes, which are machine made. They may be fitted hot or cold. Horses that are worked on hard ground need shoes to protect the wall of their foot from wearing away faster than it can grow.

Eventers usually use **"eventer"** shoes, which are:

- **concave -** inside edge of the shoe is hollowed out to discourage dirt from packing into the hoof.
- **fullered -** a groove for the nail holes. Also aids traction.

Other options:

- **clips -** called a **"toe-clip"** when on the center front of the shoe. On the sides called **"quarter-clips"**, since there is one of them over each quarter of the hoof. Optional; they help keep the shoe in place, but can cause damage to the sole and hoof wall if the shoe comes partly off out in the field and is stepped on.
- **stud holes -** holes drilled in the ends of back shoes for insertion of various competition "studs" that help in the mud or on slippery grass. Note that Pony Q Club only recommends *one* stud only on the outside of the shoe in case of interfering. Examiner *could* discuss why you have two per shoe.
- **rim shoe -** a completely fullered shoe that is used for extra traction.

Sample discussion with Examiner: "My horse wears an "eventer" shoe (i.e., a concave, fullered shoe) with stud holes drilled in back; clips and pads. He needs the studs for bad footing conditions when eventing, the clips help to hold his shoe on straight, and he needs front pads to cushion his feet since he has a slight case of navicular. He is shod every six weeks and I feed him Farrier's Formula daily."

Stable Management

Safety practices: (C pp.173-175)

Neat stable area - tools hung with tines facing wall, trash picked up and wheelbarrows stored out of the way.

No nails or objects **sticking out** of walls

Always handle horse with a **halter and a lead rope**.

No rough play or yelling around the barn.

Keep **dogs** tied short; a long rope could wrap around a pony's legs. Teach them not to chase horses.

Open **gates wide** so they don't hit the pony or catch on its blanket.

When **turning out**, shut gate and make the pony turn to face you before letting him go.

If halter is left on, has to be leather or have a **breakaway strap**.

Tie safely. (C p.174; D pp.141-144)

Fire prevention: (C p.175)

No **smoking**.

Have adequate number of **fire extinguishers**. "A" or "ABC" type only.

Aisles kept clear with a halter and lead on every stall.

Cut brush and weeds around barn.

Unplug appliances when you leave the barn.

If possible, keep **hay** in a different building.

Keep **manure pile** away from the barn - it generates heat.

Never store **flammable** liquids, oily rags or motor vehicles in the barn.

Wiring has to be in conduit (a metal pipe) and light bulbs should be in glass cages.

Toxic plants in our area: (C pp.167-169)

1. taxus yew - evergreen bush with needle leaves and red berries. Commonly used for landscaping around homes. Very toxic.
    a. When toxic: all year
    b. Parts: all
    c. Symptoms: Trembling, heavy breathing, collapse.
2. bracken fern - 2-3ft. high lacy fern that grows in woodlands and open pastures.
    a. Parts: leaves. Must be eaten for 30-60 days before symptoms appear.
    b. Symptoms: loss of appetite and loss of coordination.
3. poison hemlock - dark green, fern-like foliage. Flat-topped clusters of small, white flowers at the top of tall purple-spotted stems. Grows 2-6 ft. tall; June-Aug.
    a. Related plant: water hemlock. Pointed leaves.
    b. When toxic: summer, fall, winter.
    c. Parts: roots
    d. Symptoms: hind legs lose strength, tremors, and coma.

4. wild black cherry - very common wild tree. Grows in fence rows; has rows of narrow, green leaves on drooping branches. It has clusters of small, white flowers in late spring and small, dark berries in the late summer.
    a. Related plant: chokecherry. More of a bush than a tree.
    b. When toxic: all year, but especially when wilted (broken branch or after frost)
    c. Parts: leaves
    d. Symptoms: slobbering, heavy breathing, weak pulse, convulsions, rapid death.
5. black nightshade - vine with purple flowers; green and red berries. Grows May-Sep.
    a. Related plants: bella donna, deadly nightshade.
    b. Most toxic from early summer through late fall. Small amount can be fatal.
    c. Parts: leaves
    d. Symptoms: Depression, weakness, lack of coordination, colic.
6. red maple tree - leaves turn red and yellow in the fall.
    a. Parts: wilted or dried leaves and the bark
    b. Symptoms: severe anemia; weak, depressed, pale membranes, dark urine, death.
7. black walnut tree - has opposing, narrow leaves and produces large green husk.
    a. Parts: sawdust from the wood used in bedding.
    b. Symptoms: signs of laminitis, swelling in the legs, depression.
8. rhododendron - evergreen shrub with broad, flat green leaves and large flowers in spring. Flower colors vary from white to dark purple.
    a. Related plant: azalea. Much smaller leaves and flowers.
    b. When toxic: all year
    c. Parts: leaves
    d. Symptoms: Depression, heavy breathing, collapse, coma.
9. Horsetail
10. Foxglove
11. Johnson grass

12. Nutrition

Six classes of nutrients needed: (C p.188)

1. **Water** - 12 gallons or more daily. Dehydration causes colic.
2. **Carbohydrates** - grass, hay and grain. The **act of digesting** these provides body heat, therefore pasture-kept horses need plenty of hay in the winter.
3. **Proteins** -
   - grass and hay - from 5-20%, depending on types of plants, condition of pasture, which cutting and time of year. Grass hay has 5-9% protein. Alfalfa hay has approx. 15%.
   - grains - oats and barley (11%), corn (9%). Sweet feeds are rated by their protein content, typically 9%, 10%, or 12%.
   - soybean meal - approx. 45%. Most popular protein supplement.

   Proteins are the building blocks of life - they are needed for **growth, maintenance and repair** of the body. They are made up of 24 **amino acids**, 10 of which are called "essential" acids because they must be provided in the diet. The two most important are **lysine and methionine**. Grain is a *low quality* protein, while alfalfa hay and soybean meal are *high quality* proteins. If your horse is getting low-quality hay or is on poor pasture, feeding a 12% sweet feed would help, but adding a flake or two of straight alfalfa or some soybean meal would be even better. A good quality mixed hay that has been cut in early summer and includes alfalfa and/or clover is the best horse feed available - late cuttings of hay have reduced vitamin and protein levels.

   ***Note:** A mature pony or horse only needs 8-10% total protein in its diet. If he is working hard, he needs more *food* - not higher protein. Too much protein wastes money and is hard on the kidneys and liver.

4. **Fatty Acids** – corn, soybean, canola and wheat germ oils; rice bran. A normal diet provides enough fat, but old horses may need extra since their metabolism slows down.

5. **Vitamins -** Sunlight, good grass and hay, grain, supplements. Most horses do not need supplements - they are a waste of money for a horse on good quality pasture and feed.

6. **Minerals** - Trace-mineral salt, good grass and hay, grain, supplements. Mature horses need **twice** as much **calcium** (in grass or hay) as **phosphorous** (in grain). Using a mineral (red) salt block takes care of pony's **iodine** needs.

Feeding examples for a stall-kept horse:

- Average 1000 lb. horse who is not being ridden = 6 flakes of average-weight (3 lbs. per flake) hay per day, divided into two feedings or turnout for 2nd feeding.
- Same horse being conditioned for eventing? Same amount of hay but add 3-5 lbs. of grain (sweet feed typically weighs 1.3 lb. per quart, so a 2-qt. scoop twice a day would take care of most horses).
- If a horse is getting more than 0.5% of its body weight in grain, it needs to be divided into at *least* two feedings, since the average 1000-lb. horse has a 5 lb. limit of grain in a single feeding.

Nutrition (con't)

Availability, cost and origin of feed for *your* horse - talk to your feed man or barn manager and check the label on your grain bags.

- What is the protein rating of your sweet feed? What types of grain does it contain and in what proportions? Who is your supplier? How much per 50# bag? (e.g. "A 10% protein sweet feed mix that has 10% corn and 30% oats**;** costs $9.00 per bag at Skylight Supply").

Where does your hay come from? How much is it per bale or ton? What types of grasses are in it and in what proportion? (e.g. "A 2/3 grass/ 1/3 alfalfa mix that comes from southern Indiana at $3.50 per bale; can be difficult to find in late fall").

Vet Knowledge

Causes and signs of: (C pp.219-225)

Colic - usually can be prevented by good horse management.

- overeating grain
- spoiled feed
- sudden change in diet
- worm damage
- too much cold water to a hot horse
- hard work right after a large meal
- swallowing sand with food

Horse stops eating, looks at its barrel, tries to urinate, lies down and gets up, pulse slightly elevated. As it gets worse, it may roll, paw, kicks at its belly, breaks into a sweat. Breathing gets heavy and pulse is higher; gums may be bright red or bluish.

Laminitis/founder - horse will refuse to walk, may lie down and refuse to get up. It stands with its hind legs drawn up under its body. Feet are hot. A hard, pounding pulse can be felt in the artery at the back of its pasterns. "Fever in the feet".

- overeating grain
- fast work on a hard surface
- too much lush, spring grass
- result of a high fever or reaction to a drug
- insulin resistance and Cushings

Heaves - breathing & endurance problem (equine asthma) caused by:

- eating dusty or moldy hay
- living in dusty conditions including a barn
- allergies

Horse has a chronic cough, especially during exercise; lifts its flanks *twice* when exhaling.

Choking - the horse has something caught in its esophagus. Feeding coarse hay or large chunks of apple or carrot; feeding pellets without enough water. Horse will stop eating, keeps trying to swallow, and drools. Chewed food can come out of the nostrils.

Tooth problems - (C pp.213-215) See "Teeth" discussion below.

Horses' teeth never stop growing so as they wear down from chewing the molar teeth form sharp edges, or "hooks".

- Signs that teeth need to be floated:
  - losing weight
  - dropping grain out of its mouth as he eats
  - "quidding" - dropping chewed up wads of grass or hay out of its mouth
  - becomes hard to bridle or fussy when try to make contact with the reins

Vet Knowledge (con't)

Skin diseases - (C pp.226-227)

Ringworm – a contagious **fungus** infection. Round, crusty patches form, which then fall off, leaving round, hairless patches.

Rain rot – a **skin infection** caused by an organism that lives in ungroomed coats, especially in the spring and fall when the hair stays wet on top of the back and croup. Appears as many small, scabby crusts that leave wet, raw spots when removed. Do not curry since is very painful to the pony – treat and let heal. Dispose of scabs in the garbage and disinfect brushes since it is contagious.

Scratches/mud fever/grease/cracked heels - **chapped skin** on the back of the pasterns from contact with urine, manure, harsh detergents, or long exposure to wet, muddy conditions. Long, horizontal scabs can felt under the hair above the bulbs of the heel up as far as the bottom of the ankle.

Symptoms and prevention of: (C pp.216-219)

Flu (Influenza) – upper respiratory infection caused by a **virus**. Spread by sneezing, coughing and contact with infected horses. Depression, loss of appetite, fever, runny nose, coughing. **Vaccinate** every three months; always try to avoid direct contact with strange horses and their equipment.

Rhino (Rhinopneumonitis) – upper respiratory infection caused by a **virus**.
Similar to a cold: coughing, runny nose, fever. Causes pregnant mares to abort.
Vaccinate every three months.

Sleeping sickness (Equine encephalomyelitis) – **virus** carried by mosquitoes. First fever and excitability, then depression and drowsiness. Horse may walk in circles or stand with its head against the wall, eventually becomes paralyzed and dies. There are three major types: Eastern, Western, and Venezuelan with Eastern the most serious.
Vaccinate every three to six months.

West Nile Virus - a **virus** carried by mosquitoes. Symptoms can be confused with rabies, EPM, and sleeping sickness - muscle weakness, partial paralysis, depression, head pressing, cannot eat or drink, fever, convulsions, death.
Vaccinate yearly or booster if outbreak.

Tetanus (Lockjaw) - Caused by an **organism** in the soil that is introduced through a puncture wound. Tense and stiff, cannot eat or drink, third eyelid is exposed, high temp. Give a booster shot in the event of any deep cut or puncture wound.
Vaccinate yearly.

Rabies - **Virus**; incurable. Cannot eat or drink normally, uncoordinated, unusual behavior, paralysis, then death. Caused by bite from infected wild animal.
Vaccinate yearly.

Strangles (Distemper) - **Bacterial**. Loss of appetite, fever, runny nose with thick yellow mucus, stiff neck, abscesses form in the throat area that break and drain.
Isolate new horses before adding to the herd and **avoid direct contact with strange horses**; available vaccine is not always effective. Extremely contagious.

EIA (Equine Infectious Anemia or Swamp Fever) - **Virus** carried by flies & mosquitoes; incurable. Fever, depression, sweating, loss of appetite, weakness, staggering gait.
No treatment or vaccine. A yearly **Coggins Test** checks for exposure to this disease.

Vet Knowledge (con't)

Many diseases are spread by contact with mucus of infected horses, so it is important to **isolate new horses** for two weeks before turning them out with the rest of the herd. If visiting a barn for a show, do not take water out of **their troughs** or let your horse **touch noses** with strange horses. Use your **own water buckets** with water straight from the faucet and do not let your horse **graze** or **touch the fencing** while he is there.
At your barn, use **fly spray** and do not let water collect in tires and buckets where mosquitoes like to breed. Keep vaccinations current.

Internal parasites - (C pp.208-211)

Known as "worms", they cause damage to blood vessels, intestines, heart and lungs. Before Ivermectin, most cases of colic were caused by worm damage from **large strongyles** ("red worms"). Now our main concern is **small strongyles**.

Prevalent internal parasites: (C pp.209-210)

- **bloodworms/strongyles** - two types:
  - **large -** invade the blood vessels of the intestines and cause serious damage to the digestive system causing colic. Larvae travel to the heart, liver and lungs destroying healthy tissue.
  - **small** – can "encyst" in intestinal lining; pony has pot belly, dull coat, anemia, colic.
- **roundworms/ascarids** - usually found in foals and young horses; causes coughing and inflammation of the lining of the small intestine.
- **bots** - botfly larvae attach to lining of the stomach and cause ulcers.
- **pinworms** - live in the cecum & large colon. Pony will rub its tail and show dry, yellow discharge.
- **tape worms** - horse loses weight and can cause colic.

Routine parasitic prevention: (C pp.210-211)

Take fecal samples in the summer to determine which horses are "high shedders" (over 200 bpg) and will need additional wormings in the spring, worm all horses late fall and early spring, take additional fecal 30 days after 1st worming to check if your program is effective for your farm, worm new horses 72 hours before turn-out.
Avoid overcrowding and overgrazing pastures; rotate pastures; pick up manure from paddocks; keep hay, feed and water from being contaminated with manure, drag pastures in hot weather to kill eggs. Most common method of deworming is by squirting a tube of paste into pony's mouth. Remove botfly eggs as they appear with a bot knife or block.

Describe **your** pony's routine - what kinds of dewormers do you or your farm use? What dosage level does your pony get (based on his weight)? Do you rotate classes of dewormers? What time of year do you give which kind? How often? Does your vet ever tube worm? What do *you* use to remove bot eggs? What time of year do they appear? (C p.

Vet Knowledge (con't)

Four main classes of wormers - use all four if needed in rotation throughout the year to avoid developing resistance to the chemicals (only high shedders need to use all four) -

1. **Ivermectin** (Eqvalan, Zimecterin) - most effective wormer for **bots**, so give after a couple of hard frosts in the **late fall**. Also give any time of year for ascarids, strongyles and pin worms. Add **Praziquantel** for tapeworms at least once a year.
2. **Moxidectin** (Quest) - only effective wormer against **encrusted small strongyles**, so give in **late winter**. Also give any time of year for ascarids, strongyles and pin worms.
3. **Pyrantel** (Strongid) - also effective wormer against **tapeworms** so give at least once a year. Also give any time of year for ascarids, strongyles and pin worms.
4. **Fenbendazole** (Panacur, Safe-Guard) - ascarids, strongyles and pin worms only.

Teeth - (C pp.212-215)

A horse's teeth never stop growing, so they form **hooks** on their back molars as they wear down from chewing. These sharp edges make its mouth sore, which can cause him to lose weight. Also need to check for **"wolf" teeth** (small, extra premolars), which are easily removed if they rub the bit. Have to **"float",** or at least check, teeth every **six months** so pony can chew its food properly and stay in condition, and so the bit is comfortable in its mouth. **"Quidding"** means dropping wads of partially chewed hay or grass out of the mouth; happens when pony is trying to protect a sore place.

- Male horses have **40** teeth, while mares have **36** because they almost never grow "tushes", or **canine teeth** (small, pointed teeth that grow right behind the incisors).
- Horses are born with a set of baby teeth, which start to be replaced with permanent teeth at the age of 2½ **yrs.** This process is complete at **5 yrs**., when the horse is said to have a **"full mouth"**.
  - Incisors - Front teeth (6 top; 6 bottom) that are used to tear off grass.
  - Back teeth (12 top; 12 bottom):
    Premolars - the first three of six back teeth that chew the food.
    Molars - the last three of the back teeth.
  - Bars - the top surface of the lower jawbones, where the bit rests. Very sensitive.

Travel Safety

Trailer safety checklist - (C 261-263)

- Every time you tow:
  - check hitch and ball
  - connect safety chains
  - test trailer lights
  - check all tire pressures
- Every month: check floorboards, brakes, wear on tires. Lubricate all parts and partitions.

Equipment for travel - (D p.222-224; C p.263)

- full hay net
- water bucket plus 5 gallons of water in a container
- equine 1st aid kit
- chain shank
- extra halter
- muck equipment
- travel papers including Coggins, health certificate, truck registration, insurance card,etc.

Travel Safety (con't)

Horse's equipment:

- shipping bandages/boots, tail bandage, leather halter and tie rope with panic snaps.
- head bumper for low trailers or a pony that throws its head up.

Long distance trailering (up to a limit of 12 hours):

- stop every 2-3 hours to check on bandages, blankets, offer water
- add shavings to the trailer to encourage them to urinate; if not, unload and walk.
- do not let them graze at rest stops since the grass may be treated with chemicals
- use a tail guard instead of a tail wrap over 2 hour trip

Conditioning

Discuss condition of *your* horse - fit? thin? fat? (D pp.196-197)
List *your* horse's vital signs at rest and after work.

How to measure pulse, temperature and respiration: (C pp.234-236)

Respiration - watch pony's flank as he breathes. Count breaths for 15 seconds, then multiply by four to get the respiration rate. Normal rate at rest is between 8-16 breaths per minute. We use **10** as an average reference point.

Pulse - either feel the facial artery (at the inside, bottom edge of the jawbone) or listen with a stethoscope over the heart. Check your watch and count how many beats you feel in fifteen seconds, then multiply by four for the heart rate. Normal rate at rest is between 30-45 beats per minute. We use **40** as an average reference point.

Temperature – Using a digital thermometer, dip the silver end into Vaseline. Stand to one side, lift pony's tail and insert about 2/3 of the thermometer into the rectum. When it beeps, withdraw it, wipe clean and read temp. - if 102° or more, he has a fever. If 101°-102°, recheck his temperature over the next few hours. We use **100°** as an average reference point for a normal temperature but if his resting is 97*-98*, then check on him if 100*.

Discuss different ways of conditioning for different activities: (C pp.241-245)

Showing, dressage, show jumping: 1 hour of riding four to six days a week, with no more than 2-3 days of jumping.

Eventing: be able to do ten-minute trot sets during distance and hill work, gallop about a mile once a week. Jump twice a week, plus two days of flatwork.

Foxhunting: plenty of long, slow distance work, including trotting and hill work starting three months ahead of the season.

Note ** these are examples for sound, actively competing horses. You need to describe *your* conditioning schedule when preparing for a show, which does *not* have to be this rigorous.

Teaching

Bring letter from one of your DCs that you have already helped to teach a mounted lesson. Call your barn manager or your DC to arrange. At the testing, present a written, unmounted lesson plan (limit 10 min) to D1s to D3s using the D2-C1 Standards. Use the D Manual for ideas.
Bring any props (charts, tack, etc.) that you may need. (C pp.307-309)
Also provide both written flat and mounted lessons lasting 45-60 min.