AN ABSTRACT OF THE THESIS OF

<u>Liz McCarthy</u> for the degree of <u>Honors Baccalaureate of Science in Animal Science</u> presented on <u>August 14th, 2009</u>. Title: <u>A Proposed Equine Business Model for the Training and Resale of Jumpers.</u>

Abstract approved:		
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The goal of this project was to determine whether an equine business in which the sole income is from the short term retraining and resale of horses could be successful. Horses would hypothetically be kept for not less than six months and not longer than one year, and priced from \$10,000 to \$15,000 depending on the amount of training they receive. They would be purchased for no more than \$2,000, and all costs of care and maintenance would be accounted for. Special consideration was given to determine that all horses would be fed diets that are both nutritionally balanced and within a specified budget. To increase value, all horses would be shown, but these shows were selected based on proximity to the training facility to minimize excess time involvement and traveling expenses. To determine the practicality of the increased value of a horse over such a short time period, a trial was done with one horse. The horse's value was successfully increased to \$10,000 within the approximate time frame of 6-7 months. The horse was not sold despite an aggressive marketing campaign. Ultimately, it was determined that this was due to a drop in the demand for horses as a result of a decline in the economy. As a result, it was concluded that while it is possible to improve the value of a horse for profit, such a business endeavor would only be wise to undertake during a rise or high point in the market. An attempt at such a business should only be done if the market is projected to remain well enough to allow the business to break even and repay all business loans for start up costs within the first five years. It would also be wise if after those first five years the skills of the business owner would allow them to supplement income during poor years by training horses owned by others and waiting to purchase more resale horses until the market improves.

Key words: equine business, hunter/jumper, resale horse

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A Proposed Equine Business Model for the Training and Resale of Jumpers

by

Liz McCarthy

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I understand that my project will become part of the permanent collection of Oregon State	
University, University Honors College. My signature below authorizes release of my project to)
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Table of Contents

Selecting the Project Horse	6
Grooming	8
Feeding	10
Farrier Schedule	11
Vaccination and De-worming	12
Potential Factors for Loss of Value	14
Training Exercises	15
The Project	26
Show Schedule	34
Equipment and expenses	35
Five Year Budget	39
Final Summary	41
Bibliography	42

A Proposed Equine Business Model for the Training and Resale of <u>Jumpers</u>

Selecting the Project Horse

When searching for a horse intended for performance, a number of factors including conformation, movement, and disposition must be taken into consideration.

Conformation:

First and foremost, the horse should be well balanced and proportional in all of its parts. This will lend to efficiency of movement, comfort for the rider, and less stress on the joints and internal organs of the horse during the intense exercise that will be required (Foster, 1986). Prospects should have body mass without sacrificing athleticism. Beyond these qualities, it is also important to take a more analytical approach by evaluating each of the horse's individual parts for correct angles. Straight legs with substantial bone density are of particular concern, because this will help determine how much stress the horse will potentially be able to endure without becoming lame. The shoulder should be long and sloping to allow for good flexion of the forelimb during jumping, with a long neck for balance. The back, though it should be strong, may provide for more suppleness of the horse over fences if it is just a hair longer than that desired in many halter horses. The hip should be angled to allow for the horse to step underneath himself with his hind legs; if the croup is too flat, this will often be a problem. The chest should be wide and heart girth deep with well sprung ribs to allow for ample strength and room for lungs, heart, and other internal organs.

Movement:

Conformation will directly relate to the quality of a horse's movement. If the legs are not straight, the horse is likely to have gait abnormalities such as paddling. This will put unequal stress on the horse's legs, resulting in a greater likelihood of soundness issues as the horse progresses. A shoulder angle that is too steep will cause a short, choppy gait that may be

uncomfortable for the rider and present difficulties when teaching the horse to shorten or lengthen their stride. If a horse is built downhill, with the withers lower than the hindquarters, it will have a difficult time being able to carry more weight on the hind legs and collect which is necessary not only for flatwork but also for a quality jump.

Disposition:

The temperament of a horse when buying with the goal of reselling is very important. While many people will be willing to overlook a small conformational flaw, few people will be able to ignore a hot or mean horse. While some problems in a horse's ground manners may be related to training and can be fixed, poor attitudes or an unwillingness to work generally cannot. Furthermore, if you do obtain a "problem" horse for a resale, and are able to improve their attitude with a carefully tailored program of rewards and punishments, future buyers may not be able or want to keep up your routine, and the horse may regress after being sold. Therefore, for ease of your job and long term happiness of future clients, it is best to search out a resale horse with an easygoing, friendly personality that enjoys working.

Market Conditions:

When choosing a horse for a resale, special consideration must be given to market conditions. Research should be done by contacting local, regional, and perhaps even nationwide professionals to find out what type of horses are being sold the most in your goal price range, and what type of horse people have been inquiring about. Determine a height range, age range, breed type, and experience level. Know your limits, for example you are probably not going to be able to purchase a very green horse and turn it into an experienced 4' jumper within six months.

Grooming

The daily grooming routine should consist of currying the "fleshy" parts of the horse, including the neck, shoulder, hip, and sides, to remove dust and dead hair. Particular care should be taken over the saddle area, to be sure that potential irritants are removed before saddling. A medium bristle brush should then be used to lay the hairs of the coat flat. Hooves should be picked and cleaned out before riding to ensure that there are no rocks or other objects lodged in the feet that could cause injury. This will also keep the sole drier and prevent thrush infection, which is not only offensive in odor, but can cause lameness if it becomes severe. The mane and tail should be combed every day to reduce tangles, and a spray in detangler should be used to decrease hair breakage, leading to increased fullness of the mane and tail which makes the horse more presentable and will appear more desirable to potential buyers. A damp rag should be used to remove any dust from around the nostrils and eyes which can be irritants and detract from the horse's overall presentation.

The mane should be regularly pulled to be shortened to a length of approximately three inches. This will create a cleaner, neater appearance, and will show off an attractive neck if the horse is appropriately muscled. Pulling the mane will make it thinner than cutting, allowing it to lay flatter on the neck. However, if the horse has a naturally thin mane, or is overly sensitive to the pulling sensation, the mane can be trimmed and more lightly thinned with a razor, or by cutting the mane to the desired length and thinning by the use of scissors at a vertical angle. Ideally, the mane should fall on the right side of the neck for traditional reasons. If the mane tends to fall on the left or on both sides, it can be banded. Rubber bands placed on adjacent, thick sections throughout the entire mane are usually most effective. Often, banding the mane in smaller sections can be irritating to the horse and they may rub their mane. The tail should be trimmed just above the fetlocks, to give a clean, neat look and to prevent it from being stepped on and pulled out. This will create more fullness to the tail and keep it cleaner from debris.

The whiskers around the muzzle and eyes, bridle-path, and the coronet band and fetlocks should be regularly trimmed for neatness and presentability. The ears can also be trimmed if desired, though it may be best to avoid clipping out the entire ear if possible, as the hair is important in preventing debris from entering and insects from biting the inside of the ear.

If a horse's coat is particularly long, or the horse is in poor condition, body-clipping may be wise. Body-clipping will improve the comfort of a horse that is slow to shed when the weather suddenly turns warm. It also prevents a sweaty horse from catching a chill while they are drying off in the winter. Body-clipping a horse can also significantly decrease the amount of

time required for grooming before and after riding sessions. Horses that are body-clipped will need to be blanketed in cool weather, when horses with natural coat lengths may not need to be. It is best to body-clip horses in the fall and early spring, before horses start shedding, so that you do not interfere with the incoming summer coat.

Depending on the efficiency of the clippers, thickness of the coat, and patience of the horse, it can take between 3 and 5 hours to body-clip a horse. Regular breaks should be given to the horse at least every hour or so by untying or removing them from the cross-ties and returning them to their stalls for 15-20 minutes to allow them to stretch and relax. Clipper coolant should be used to prevent overheating of the clipper blades, which should be checked regularly to be certain they are not causing undue discomfort to the horse.

During the dryer months, or if the horse is stabled inside most of the day, hoof oil or conditioner should be applied at least once per week to strengthen the hoof wall and decrease the possibility of hoof cracks. During wetter months, a thrush preventative should be used once every week to lower the likelihood of a thrush infection.

When weather allows, it is ideal to bathe the horse once each week. This will decrease the possibility of skin fungus from dirt and sweat build-up, and improve the appearance of the horse's coat. The teats of mares should be gently scrubbed to remove any built up debris, which can cause discomfort and lead to tail-rubbing. Once per month, geldings' sheaths should be washed for the same reason, and also to help prevent infection from dirt buildup.

Feeding

With the cost of hay and grain on the rise, the faster a horse can be resold the better as less money will go into feeding it. Currently in 2008, most prices in Oregon are nearing \$200 per ton for orchard grass, and \$165 per ton for horse quality alfalfa. If the average horse eats about 20 pounds per day of hay, this means that it is consuming approximately one ton of hay every 100 days, and about 3 ½ tons per year (Evans, 2002). If this is entirely orchard grass, cost of hay is \$2 per day, and if it half orchard and half alfalfa, approximately \$1.83 per day.

To add energy to the diet for a performance horse, grain or concentrate can be added to the hay or forage ration. While up to 0.75% of the horse's bodyweight can be fed in grain, this will cause some changes in the pH of the hindgut, so a safer formulation is 0.5% of the horse's bodyweight (Sherwood, 2008). For a 1000 pound horse doing moderate intensity work, this adds up to 5 pounds of grain per feeding, or 10 pounds per day.

At a cost of approximately \$15 for a 50 pound bag, it is easy to see where the bulk of the cost of feeding comes from, and where it is most important to minimize costs while still providing adequate nutrition.

If a horse is fed at the maximum ideal level for grain, which is 10 pounds per day, this would be \$3 per day in grain, and \$4.83 for hay and grain per day total, which, for this instance, I will round up to \$5 per day.

Many people feel the need to "top-dress" their horse's grain ration with extra vitamins. However, most commercial feeds are formulated with the vitamins and minerals already balanced, so that top-dressing is not needed. Furthermore, top-dressing is often expensive, unnecessary, and can even be dangerous if the appropriate balances are offset (Sherwood, 2008). It is better to search for a reasonably priced concentrate that is properly formulated, as this will save time and effort and most likely be better for the horse.

Farrier Schedule

Every six to eight weeks, most horses will need to have their feet trimmed, and, if they are shod, will need to have their shoes re-set. Since shoes counteract the hooves' purpose of absorbing shock by flexing and bending, it is best to only have a horse shod when absolutely necessary. This means, ideally, that they are only wearing shoes for that six to eight week time period during which a show falls, since most show grounds have gravel or concrete somewhere on the grounds, and because unshod hooves can be pierced by sharp objects, causing an abscess to form.

Though individual farriers will have differences in fees depending on experience and ability most will charge between \$40 and \$60 for a trim, and \$100 to \$150 to trim the hooves and set shoes on all four hooves. Since this needs to be done about twice in three months, a high-range monthly average for trims would be \$40, and for shoes \$100.

Vaccination and de-worming

When creating a de-worming program for horses, there are a number of factors to consider, including the age of the horse, total number of horses being kept on the property, and stocking density. For most situations, horses above the age of 2 being de-wormed every 3-4 months with an oral paste is sufficient. In younger horses, or situations where a high number of horses are kept on a small amount of land, it may be better to de-worm every 2 months. In order to avoid developing parasites that have resistance to certain chemicals, it is important to rotate the type of chemical used each time you de-worm.

When purchasing a horse, a record of past and recent de-worming should be requested, if available. This may help in determining an appropriate program. However, if this is not available, or if the horse has not been recently de-wormed, it may be wise to have a fecal float done to determine the degree of infestation. Signs of heavily infested horses include rough hair coat, lethargy, poor performance, and anemia, which should be noticed by a veterinarian during the pre-purchase examination. Such horses should be given an initial dose of dewormer, and then a second dose of the same chemical 5 days later. Ivermectin may be the best choice because it is one of three larvicidal chemicals, and is the only one of the three that targets bots. After dosing, horses should be closely monitored, because impaction colic can result from the passing of high numbers of dead worms.

There are three main "groups" of chemicals used in oral paste de-wormers. These are the benzimidazole group, the pyrantel group, and the avermectin group. When putting together a rotational plan, it is important to recognize that changing chemicals within the same group, such as using a fenbendazole the first time, and then a thiabendazole three months later, does not constitute a proper rotation, because the drugs work in the same way and are too similar to avoid the possibility of parasites developing resistance.

The parasite whose life cycle is most dependent on the seasons appears to be the botfly, which lays its eggs in the fall. The best chemical group to target bots is the avermectin group, so either ivermectin or moxydectin should be given to the horse in the fall, ideally just after the first freeze, which often occurs in October. Subsequent chemical choices, as long as they are rotational, can be left to the discretion of the horse owner. However, if bots are a severe problem, an avermectin chemical can also be used in the spring.

Factors to consider when determining an appropriate vaccination schedule include contact of the horse with other animals, stress level, travel, and age. According to recommendations from the American Association of Equine Practitioners, all horses should be vaccinated for West Nile, Tetanus, Western and Eastern Encephalomyelitis, and rabies. However, it is arguable that rabies is really only necessary in areas where it is prevalent, and this does not include the Pacific Northwest. Horses which are incurring a fair level of stress, and which will be travelling to shows, should also be vaccinated for influenza and rhinopneumonitis. Because of the high numbers of strange horses a show horse is going to be in contact with, one may also opt to vaccinate for strangles.

If the horse that is purchased is not up to date on some or all of these vaccinations or a past record can't be obtained, boosters will need to be given after the initial dose in many circumstances. For horses that are current on vaccinations, a West Nile vaccine should be administered in the spring, just before mosquitoes begin to hatch, and then again in the late summer, because the Culex species of mosquito that is responsible for transferring the majority of the West Nile Virus hatches in the fall. Tetanus toxoid should be given once a year and the Western and Eastern equine encephalomyelitis vaccine should be given once a year in the spring. If the horse will be travelling to southern states surrounding the border of Mexico, it should also be vaccinated for Venezuelan equine encephalomyelitis at the same time. The equine encephalomyelitis vaccines may be given every six months if risk of exposure is high. In show horses, it is best to administer vaccines for rhinopneumonitis and influenza every 3 to 4 months. If the strangles vaccine is also chosen to be administered, it should be used every 6 months. For a horse whose vaccinations are questionable or not current, all of these vaccines should be boostered, meaning a second dose should be administered, 4-6 weeks following the initial vaccination. Particularly with regard to the West Nile vaccine, it is helpful to know the form of the vaccine that was used, whether live, live-modified, recombinant DNA, or killed. This is because it is necessary to booster the initial vaccine 2-3 weeks after the initial dose whenever a switch is made from one form to another.

Potential Factors for Loss of Value

An equine resale business is inherently risky in that there is always the possibility for horses to become ill, injured, or lame, resulting in a brief setback in training at best and long term loss of use at worst. While many of these chances for loss of value can be minimized with good footing, routine health care, and knowledgeable handling, the risk cannot be completely nullified. Therefore, it is important to take into consideration the possibility for loss of value outside of your control, and be able to determine whether it would be wiser to keep a horse until they are healed or sell them at a loss.

While many of the potential viruses a horse might encounter can and should be vaccinated for, a horse may still be able to become ill if they are exposed during a booster series or a period of low immunity. Depending on what they get sick with, and how long they are sick, a horse may need anywhere from a couple of weeks to six months to fully recover and return to training. While a short term lapse would not be as much of a problem, six months of paying board and feed bills with no increase in value would be a more significant concern. If a horse will require a long period of time off, you would need to determine how well they are taking to the training, and what their long term potential will be. If a horse is learning very quickly and is performing well, it might be worth it to keep them until they recover, whereas if a horse is progressing slowly and shows little potential, it might be wiser to sell them for a low price before you have to pay to house and feed them any longer.

There are a range of injuries which can occur to the tendons and ligaments of the legs which can be long setbacks in training. If stresses occur to these, and can be caught and properly treated before they become severe and result in tears or ruptures, it can make the recovery time much shorter. A working knowledge of the placement of the superficial and deep flexor tendons, check ligament, and suspensory ligament can help a great deal in understanding the severity of a stress injury. However, if tendons or ligaments are severely stressed or torn, they can take upwards of nine months to a year to heal fully if there are no complications. These injuries are also very time consuming to care for, and can not only be expensive, but may also limit the horse's potential future suitability as a jumper because of the extreme stress placed on the legs during takeoff and landing. Unless a veterinarian's prognosis is very optimistic and the injured horse shows a great deal of potential, it would probably be best to either sell the injured horse or find someone to lease them for a short time as a companion animal or some other appropriate use until they are healed.

Training Exercises

Fundamentals:

- The inside leg is the "gas pedal", and the outside rein, through the shoulder, is the "brake".
 - This functions to keep the horse straight, without excessive force or aids that may be applied unequally and can be confusing or overwhelming to the horse.
 - The part of the leg that should be used to cue is the inside of the calf, not the heel.
 - The rein cue should be applied by stretching up and slightly back in the shoulder, while keeping the forearm and hand relaxed. This provides resistance without any backwards pull that is rough on the horse's mouth and discourages the desired sense of moving forward into downward transitions. Even though the horse is slowing in the transition, they are still moving forward, and pulling backwards doesn't allow for this.
- The horse should always travel straight, with haunches and shoulder square and in line behind the poll. Straightness is to be the focus before softness, as softening and relaxing on the horse's part will come with straightness.
- The horse should be equally strong and flexible on both sides.
- True self-carriage is achieved by encouraging the horse to accept contact with the bit, stretch the topline and raise the back, not through an artificial breaking at the poll.
- If a horse leans on one side of the bit more than the other, and is therefore constantly bent away from that direction, this is most commonly caused by a weakness in that hind leg.
 - This should not be addressed by excessively "bumping" the bit on that side to encourage the horse to flex its poll that direction. This only causes the horse to be "behind" the bit, and is a short-term "quick-fix" that doesn't address the real problem. The horse will also commonly push their shoulders away from the side of the mouth on which they are being pulled, causing them to fall out of line so that they are not straight.
 - Instead, the horse should be encouraged to take a longer step with the hind leg on the same side on which they lean on the bit. This will, over time, strengthen the hind leg, encourage straightness, and result in proper softening.

Flat Exercises:

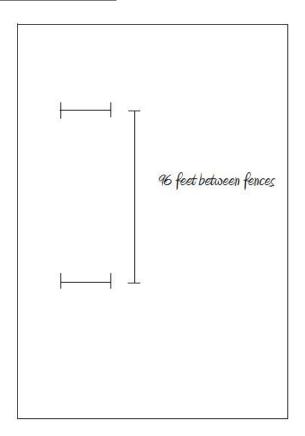
- Leg horse forward from halt into a walk
 - If the horse does not respond promptly, use a stick just behind your leg as reinforcement. Then halt and repeat until the horse moves forward off the leg without hesitation. Can be repeated at the walk-trot and trot-canter transition if necessary.
- On a large circle, at the walk, use alternating pressure with the inside leg to encourage
 the horse to step towards the pressure of the outside rein, resulting in a longer stride
 with the inside hind leg.
 - This exercise is very effective for horses that are "hollow" on one side and "bulge" on the other. The process will take some time, but the results will be well worth it.
- Leg the horse forward from the halt into the walk. Be sure that the inside leg is used to encourage the horse to take the first step or two towards the outside rein. After walking a few steps, halt, being certain that the inside leg is used to encourage the horse to step into the resisting (not pulling) pressure of the outside rein as the rider's shoulder stretches up and back.
 - This exercise is beneficial for sorting out inside leg to outside rein pressure for both rider and horse.
 - This can be repeated at the walk to trot and trot to canter transitions, as well as the associated downward transitions.
- From a halt, stretch up and back in the shoulders, keeping the forearms relaxed. Apply inside leg, and provide more resistance with the outside shoulder. The horse should back in a fairly straight line. If the horse moves into the leg, more pressure should be added while the hand is relaxed further.
 - o Backing exercises can be demanding on the hocks and hind-quarters, so they should be slowly added into the training regimen, and care should be taken that they are not over-done.
 - O Ideally, two or three steps should be asked for at a time. The goal is for the horse to soften and take a long step, creating more flexion in the hock and strengthening both the hocks and the sacroiliac joint, both of which are important for proper collection.
- Alternate sitting trot on the short walls, and counter-canter on the long walls. Emphasis should be placed on proper transitions and bend.

- o If done correctly, this exercise will improve the inside leg to outside rein connection, improving suppleness and engagement.
- Counter-canter can be difficult for young horses and those in poor condition, so care should be taken to be sure that it is not over-worked.
- Turn on the forehand and turn on the haunches
 - These are good precursors to lateral movement, and the horse should be fairly comfortable with them before introducing more difficult lateral movements such as leg yielding.
 - These exercises are also good for determining whether horses are more resistant to move one way or the other, and can help the horse become more balanced in this respect.

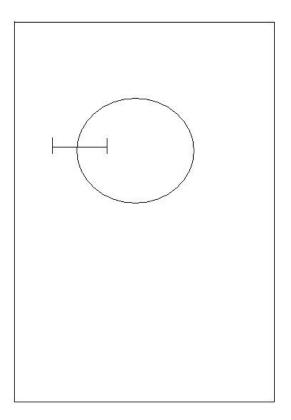
Leg yield

 When the horse is physically and mentally ready to work this movement, it can further improve the inside leg to outside rein connection, and thus, straightness, suppleness and engagement.

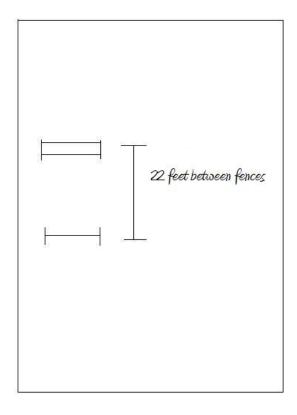
Over-Fences Exercises:



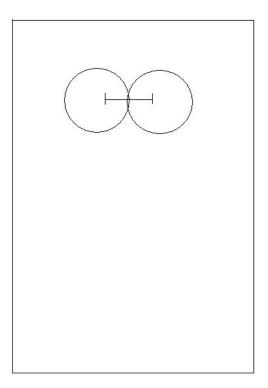
- Level of difficulty: 1 (easy/introductory)
- Trot into the first fence, halt before the second. Repeat until the horse relaxes and does
 not rush, then jump both fences, riding with 7 strides in between. This exercise is good
 for green horses, horses that like to rush, and those wanting to improve straightness.
 Work one direction first, then switch so that both sides are worked evenly.
 - Advanced option: Add one or two strides in between fences when riding the full line, then repeat, leaving out one stride. Ride again, adding one or two strides.
 This is good for teaching the horse to stay soft in collection and extension, and to alternate between the two without losing impulsion or getting overly excited.



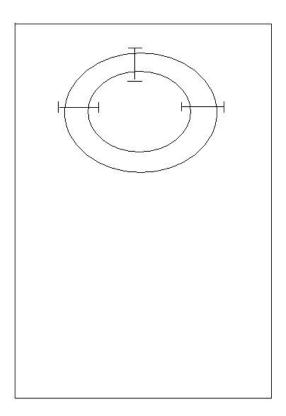
- Level of difficulty: 1 (easy/introductory)
- "Circle" jumping should be done in both directions for evenness. The horse should be allowed to find the distance, without excessive interference from the rider. A consistent bend should be maintained throughout, so that the circle is completely round and not lop-sided.
- Alternate forward distances by softening and allowing the horse to move forward by lengthening the stride, and not pushing, rushing, or quickening with "waiting" distances, adding shorter, more collected strides on the approach to the fence by stretching up and back in the shoulders and resisting (but softening to allow the horse to jump one or two strides out).



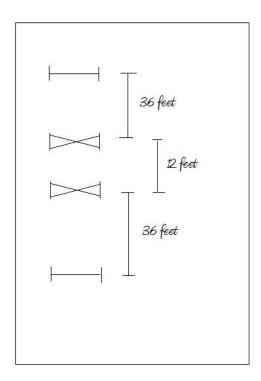
- Level of difficulty: 2 (introductory-intermediate)
- This exercise can be ridden as a figure eight, with a side of each loop going over one fence.
 - Alternate riding forward, with a slightly longer distance, and waiting for a slightly shorter distance to help the horse learn to extend and collect their stride when you ask as they approach the fence.
- This can also be ridden as a line of fences, and jumped in either direction:
 - Approach the vertical as the first fence in the line, then proceed to the squared oxer
 - Can be approached with more forward momentum
 - Approach the squared oxer first, and then proceed to the vertical. Should be ridden less forward, because the vertical is a narrower fence the horse should leave the ground farther out than if jumping an oxer.



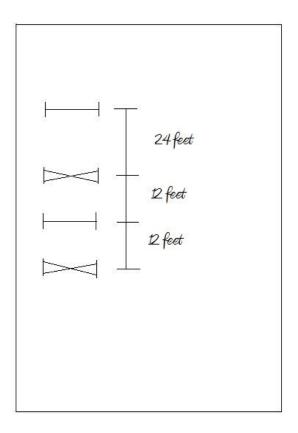
- Level of difficulty: 2(introductory-intermediate)
- For green horses, this exercise can be done with a ground pole before using a jump. Ride as a figure eight with the pole or fence to change directions.
- This is good for learning to maneuver tight turns by "guiding" the horse's forward motion, rather than pulling back. It can also help when learning to use inside leg to create bend, and in recognizing and improving a weak side.



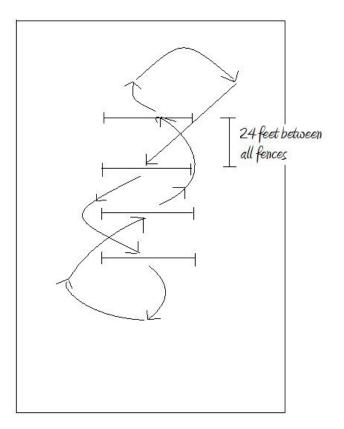
- Level of difficulty: 3 (intermediate)
- For green horses, this exercise should be started with ground rails before using low fences. The inside track should be 24 feet between fences, and be ridden in one stride, while the outside track should walk as 36 feet and be ridden in two strides.
- This should help improve finding the proper distance to fences on a bending line. It should be ridden as a circle, as if the fences are not there.



- Level of difficulty: 4 (moderately challenging)
- This gymnastic exercise is good for improving hock flexion by encouraging the horse to jump up and over rather than flat, while softening and stretching their topline. Horses should be allowed to find their own distance to the fences, and not be held by the rider. This will help the horse to think about where their legs are both before and after the fences.



- Level of difficulty: 4 (moderately challenging)
- The bounces, or jumps are set close (usually 12 feet or less apart) so that the horse does not take a full stride in between each jumping effort. The close set fences in this exercise should be set low, with the middle fence the highest to encourage the horse's awareness.
- This is a good exercise to encourage the horse to not rush and jump flat, but instead to jump up and round. The rider should maintain a soft two-point position throughout.



- Level of difficulty: 5 (advanced, very difficult)
- This exercise will improve transitions between bending and straightening before fences. The outside rein should be used to straighten the horse which will allow for the best distance.

The Project

October

To begin my search for a project horse, I asked local professional jumper trainers Jason and Jennifer Nagel what type of horses they were seeing the highest demand for. They felt that a lot of people seemed to be looking for solid minded, forward children's jumpers. They informed me that many people had asked them for horses around 16 hands. They also suggested that the younger the horse the easier it would be to break any bad habits or retrain if needed. While thoroughbreds were not out of the question, they had a bad reputation for being hot and difficult to control, so a warmblood type or cross would be more desirable. Color doesn't necessarily affect temperament, but chestnuts also had a reputation as being difficult to work with, so that color was to be avoided if possible.

Through local connections, I was informed of a horse for sale in the area at a very reasonable price of \$1000. Interested, I called the owner and set a time to see the horse. I found that the horse was a mare, suspected to be thoroughbred or potentially a warmblood cross, just over 16 hands and about 9 or 10 years old. The owner claimed she had been started over fences, but was currently lame on a hind leg due to an incident a week prior in a trailer. However, the horse appeared sound when lunged, and had fairly correct conformation, with a quiet, willing temperament. It seemed like it would be an easy project to tune her up over fences and resell her, so I called a local veterinarian to set up a pre-purchase exam.

When the veterinarian arrived, he began with a physical inspection of the horse, during which he discovered two separate peculiarities I had not noticed. The mare had a strange growth in between her hind legs, which the vet noted would cost around \$1500 to remove, as the mare would need to be sedated. Also, the mare's vulva had been partially sewn shut, as is done with some poorly conformed broodmares to prevent excessive fecal contamination in the reproductive tract, which can cause fertility problems. Furthermore, the veterinarian noticed that the mare was slightly pigeon toed. When we continued to the movement assessment, the veterinarian became particularly concerned about her potential long-term soundness as a jumping mount with the weakness created by her pigeon-toed conformation. With the concerns the veterinarian presented, I decided that the mare would not be such an easy project after all, and chose to continue looking for other horses.

November

After spending considerable time talking to contacts and searching through advertisements on billboards at local tack shops and online websites, I located a potential project horse that sounded promising. She was a 4 year old thoroughbred mare that was only raced twice before being sold with no injuries from the track. She had already been re-started as a pleasure horse, and lightly started over small 2 foot fences. The pictures showed good conformation and the owner described her as sweet and willing. Based on all of this, I decided to set an appointment to view the horse in person.

A prepurchase exam was scheduled for Friday, November 30th, to be conducted by a reputable equine veterinarian. Cost of the prepurchase exam totaled \$325, with a farm call charge of \$75 to add to a \$400 cost. Elements of the prepurchase exam included a neurological test, detailed physical examination, along with flexion and movement tests. The veterinarian took into consideration the horse's age, past circumstances, and buyer's intended use.

The horse was deemed in good health and capable of performing in the buyer's intended use except for a lameness that was observed in the front leg. The veterinarian determined that the horse most likely stressed a tendon in the lower leg playing out in the pasture earlier that week, and that two weeks of stall confinement and some initial bute administration would be the best treatment. It was agreed that the seller would follow the veterinarian's prescribed directions and contact me as the buyer in two weeks to notify me of the horse's condition.

December

On Wednesday, December 12th, the seller called to notify me that the horse was sound and could be flexed and trotted with no appearing affect. The next day, Thursday, December 13th, the horse was picked up from the seller in Tacoma, Washington, and relocated to a facility in Canby, Oregon where she would be trained and housed for the duration of the turnover process. This was approximately a 2 ½ hour drive one way, so with both considered the cost of gasoline used totaled over \$100.

Now that Daisy was moved, she needed to be brought up to date on all of her vaccinations and de-wormer. Since her previous owner had given me her records, I knew that she was soon due for these, but did not need to be boostered. After she had a week or so to settle in so her system wasn't under too much stress, I gave her a six-way vaccination for flu/rhino, Eastern, Western, and Venezualen Equine Encephalomyelitis, and tetanus. I then de-

wormed her with a benzimidazole de-wormer, planning to rotate chemicals so that I can use an avermectin in the fall and possibly also in the spring.

Daisy's previous owner was feeding her five pounds of orchard grass and five pounds of alfalfa hay two times daily, as well as keeping her out on a small grass pasture most of the day. To minimize stress, we continued to feed Daisy five pounds of orchard and alfalfa twice daily, but also supplemented with an extra five pounds of orchard grass hay in the afternoon since daily turnout time was limited and she would not be able to consume as much grass as she was used to.

Though the equine resale business described and budgeted for requires the owner and trainer to be the same person, because I am not yet a professional I decided I would be most successful in retraining Daisy if I had the help of knowledgeable jumper trainers. Since this part of the project was more to find out if it would be possible for a professional to significantly increase the value of a horse over a short period of time, I felt this would not affect the accuracy of the results. So, to improve my chances at being successful I relied heavily on the help of local jumper trainers Jason and Jennifer Nagel of Woodvine Farms, who agreed to work with Daisy in a full time training program.

After giving Daisy the weekend to recuperate and settle in to her new location, we made an initial evaluation of her current training under saddle, and over the course of the next week determined what aspects we would begin to focus on. We started by ensuring that she was forward from the leg, and then determined which side, and in particular hind leg, was weaker, based on which shoulder she bulged through the most. We discovered that Daisy was very stiff through her topline, probably due to her previous time spent as a racehorse, and that she was also somewhat sensitive in the mouth, tossing her head when the bit pressure was not steady. Despite some of these problems, Daisy was very forward, nicely put together, sensible, and really appeared to enjoy jumping, so we were optimistic about her potential.

During the remainder of the month, we introduced small lateral movements, such as turn on the forehand and haunches to help Daisy become more symmetrical, and began to ride her in draw reins to encourage her to lengthen and stretch over her topline, as well as prevent her from avoiding changes in the bit pressure by tossing her head. We only did simple jumping exercises, often circle jumping or jumping on a figure eight (see over-fences exercises, pages 15 and 18), and focused on improving Daisy's flat work since this would also improve her jumping.

January

We continued to work on Daisy's flatwork and simple jumping exercises (see overfences exercises, pages 14, 15, and 18). As a transitional phase between flat work and jumping, we began to introduce more work over poles. We set up small variations such as circling over a pole and a figure-eight with a pole as the center where you change directions. Daisy was first walked and then trotted through the exercise with the focus on getting her straight in her body before going over the poles, and encouraging her to soften in her jaw and come up through her back as she stepped over the poles. This would help Daisy learn to stay relaxed and be a foundation for proper jumping form.

Since Daisy was looking a little thin after two weeks of hard exercise, we decided to supplement her diet with ½ pound of grain twice a day. The grain we chose to use was a high fat, balanced performance horse feed that was also balanced with important minerals such as selenium, so that there is no need to top-dress the grain with supplements.

We had a veterinarian out to work on Daisy's teeth this month, since to the previous owner's knowledge she had not been done before. We suspected that some of her head tossing problems could be related to an issue with her teeth that was affecting how the bit pulled on her mouth. We were a little surprised by how many sharp ridges she had on her molars. We were confident that having her teeth corrected would improve her under saddle work enough to justify the \$300 cost.

February

At the beginning of the month, we introduced simple courses. We continued to work on her flat work and over poles, and limited the amount of course work to keep her from getting too excited about jumping so many fences in a row. We worked to improve her response to the half halt, encouraging her to shorten her stride, and if she got too fast and carried away while riding a course, she was halted and sometimes backed before circling at the trot or canter and resuming the rest of the course.

Toward the end of the month, we took Daisy to a small, local jumper show to expose her to a busy show environment and see how she would react, without giving her the added pressure and stress of asking her to perform. We arrived at the show grounds early to give her time to settle in to her stall before we tacked her up and schooled her on the flat while others were warming up for their classes. She was very sensible and calm about being in such a busy environment, so we were optimistic about how she would be at shows in the future.

March

We increased the amount of coursework being done, but also added some more challenging over-fences exercises. We set up gymnastics (see over-fences exercises, pages 19 and 20) that really challenged Daisy to shorten her stride by carrying more weight on her hindquarters while stretching over her topline, so that she would learn to jump up and around the fence, rather than flat and across it. We continued to work on her flat work, adding more challenging lateral movements such as leg yield, and to work her over poles.

Since Daisy had now put on a healthy layer of fat, and had some excess energy to spare even with a five or six day per week work routine, we decided to replace the alfalfa hay in her diet with an equal weight of orchard grass hay.

On a once every three month deworming schedule, Daisy was due to be de-wormed this month. There were not many signs of bots so I chose to use a pyrantel de-wormer. Since she is in a high-traffic training barn and would be shown in the summer, I also vaccinated her for rhino/flu and all three forms of equine encephalomyelitis.

<u>April</u>

Daisy's flatwork was beginning to improve, but she was still resistant to softening her back and jaw. This was especially problematic when half halting and when trying to get her to lengthen or shorten her stride. We did exercises with stride adjustability (see over-fences exercises, pages 14 and 16), taking the same line of fences multiple times, but varying the number of strides fit in between them, sometimes one or two more, and sometimes two less. Eventually, she started to get a little more comfortable at changing between a forward distance and a holding distance, but this still needs a lot of work for her.

May

This month was spent focusing on preparing Daisy for the shows we planned on entering, the first being held the final week of May. We continued to vary flat work with poles, small exercises to warm up, and a course or two at the end of the work out at least 2 days per week. We also pushed to increase the height of the fences Daisy was jumping, since she was developing better form. Since we aimed to show her in the 2'9" to 3' divisions, we needed her schooling at home comfortably at 3' to 3'3". With her, it was challenging to keep her from getting too excited on long lines, but raising the fences a little helped to back her off since it was harder for her to avoid hitting rails if she jumped flat instead of with a proper bascule.

To protect Daisy's feet from the hard footing, gravel and pavement she was likely to encounter at show grounds, we decided to put shoes on her. The farrier shod her the Wednesday before we planned to move horses to the show grounds, so we schooled her on Thursday to finish out the week. However, on Friday she came up lame on her left front leg. We ultimately determined that this is because she had a nail put a little too far in on her hoof wall, which is easy to do with thoroughbreds as they tend to have thin walls. This made her sensitive, but was made worse when we jumped her the day after having her shod. We decided to take her to the show to at least have time to settle in to the atmosphere, but she was lame for most of the week, so we were unable to enter her in any classes. Instead, we opted to enter her in a show at the same grounds the following week, and to give her a few days off before jumping her after being shod in the future.

<u>June</u>

The second show that we entered Daisy in fell over the first week of June. After already having a week to settle into the showground, she wasn't too unsettled by any of the commotion while we schooled her to prepare for classes. Also, since we stayed over from the previous show, which ended on Sunday, we had an extra day to work on the flat on Monday since typically the first day to haul in for the show would have been Tuesday. We entered two classes per day, starting on Wednesday, so that she would not have to jump more than two courses in a day. We also limited her warm-up so that she would not be worn out before she showed. Her front and hind legs were wrapped with standing wraps to support them from the extra strain they received, and a number of other measures were taken to reduce stress that could lead to ulcers or lameness, such as hand walking at least twice per day. We did not have any further problems with her shoes, or any other lameness concerns, and Daisy seemed fairly relaxed throughout the week. She was fairly responsive to half halts during her courses, and performed up to her current level of training, only dropping a few rails.

The Hood River Classic occurred during the last full week of June. After how Daisy performed at the last show, we had a pretty good idea of what to expect. She was a little distracted by some objects outside the ring, especially since it was windy for the first part of the week, but for the most part a half halt on the outside rein refocused her enough to keep her from spooking. The newest challenge presented by this show was that instead of sand or some other sort of footing, the show rings had well maintained grass. This meant that the ground was not perfectly level throughout the ring, as it had small inclines and slopes, and did not have recoil like footing would. All horses will react differently to jumping on grass, but a responsive horse will perform better since half halts are important to properly adjusting the stride for the changing ground line.

The biggest problem we had at this show was in keeping Daisy from getting tight in her jaw and resisting the half halt. When she did this on small downhill slopes, she hit rails. However, overall she was very solid and had a few competitive rounds. We entered no more than two courses per day, and on days that she was particularly good on the first course, showed in only one. We gave her one day of no classes, on which we only rode her on the flat, about half way through the week so that she could have an easy day to recover.

Since this would be her last time to be de-wormed before the fall, I chose to use another benzimidazole, so that I could rotate to the avermectin to control bots. Because of the high stress she was encountering from traveling and shows, I also vaccinated her for rhino/flu and the three equine encephalomyelitis viruses.

July

With the Country Classic during the second week of July, Daisy only had one week at home to recover. We gave her a few days off to rest, and then worked her on the flat and did some light jumping to make sure that she was responsive to the half halts and not getting too tight in the jaw and stiff in the back.

Though the Country Classic was at the same showground as the first two shows we took her to, it was set up a little differently, and these changes seemed to unsettle her a little for the first day or two. By the end of the week however she settled in and was performing better, leaving most of the rails up in her classes.

With just over 6 months of training, and a solid show record for a five year old, Daisy was ready to be advertised. We started by printing up flyers detailing her best qualities and her show record, and posting these at the local show ground and tack stores. We also placed an advertisement on Dreamhorse.com and a few other smaller equine sale search engines. We priced her at \$10,000, the value at which professional trainers Jason and Jennifer Nagel appraised her, hoping that the market would be fairly good and she might sell before the fall.

August

Recognizing that Daisy's biggest difficulty was in her ability to stay soft and relaxed over her back, we decided to spend more time focusing on teaching her to jump by rounding her back and reaching forward with her neck. To accomplish this, we spent a significantly longer amount of time with her on the flat, working to get her to stretch forward and down to the bit on a longer rein, while staying relaxed in her jaw. This was then applied to work over poles, and then finally to jumping. With her improved flatwork, Daisy was able to approach the jumps in a softer frame that made it easier for her to jump up and around the fence, allowing her to more

easily maneuver shorter distances and jump out of tighter turns. We also wanted to be able to change between shortening and lengthening her stride without her getting stiff over her topline.

September

Now that Daisy's form had improved some, making it easier for her to clear fences, we began to challenge her a little more by raising the height of the fences she was schooling. Maintaining a soft frame, Daisy was able to clear courses set up to 3'6", keeping a consistent pace and balance throughout. Towards the end of the month, we made a sale video of her working over a 3'6" course, and were fairly confident that it appropriately showed the abilities of a horse that was fairly priced at \$10,000.

Daisy was de-wormed with an avermectin de-wormer, since the chemical is most effective with bots, which are most prevalent in the fall. To continue her 3-4 month vaccination plan, I vaccinated her with rhino/flu and the three forms of equine encephalomyelitis.

Ultimately, Daisy did not sell within the longest allowed time frame of one year. Though it was determined that her value had increased significantly, and she was well marketed, very few people had contacted us as seriously interested buyers. Upon inquiry, it appeared that many other local equine professionals were noticing a trend of fewer people looking to purchase horses, and more horses were remaining on the market for longer periods of time. As these horses remained for sale beyond the length of time the sellers had hoped they would, and hay and grain prices increased making it more expensive just to keep them, prices for these horses were continually dropped. This caused a lowering in the overall value of the horse for sale, since so many quality horses were becoming available at unreasonably low prices.

Since the equine market is not separated from all other facets of the economy, it was necessary to notice what other factors might be playing into this. For some time, the economy had been slowly declining, and it seemed that the spring and summer of 2008 promised little improvement. With so many people cutting back on their spending to account for the declared economic recession, it appeared that purchasing new horses was one activity that many people were reluctant to do.

Show Schedule

For this scenario, to minimize extra time and stress, and reduce fuel used, all of the shows that the horses will be potentially entered in will be close to the facility where the horses will be trained, in the Portland, Oregon area. If planned correctly, no more than 3 horses would be taken to each show, since, depending on the amount of time they will be kept before being resold, each horse will only be shown 2 or 3 times. While there would be extra charges for shavings, hay and grain could be brought in the horse trailer, requiring no extra to be purchased at the show grounds.

May 28-June 1

Rose City Opener, Wilsonville, Oregon

June 4-8

Early Summer Hunter/Jumper #1, Wilsonville, Oregon

June 25-29

Hood River Classic, Hood River, Oregon

July 9-13

The Country Classic, Wilsonville, Oregon

Average cost for each horse per show:

Stall: \$185

Shavings: \$20

Classes: \$40/class, 2/day for 4 days: \$320

Drug Fee: \$12

Total: \$537

Equipment and Expenses

As with any business, an equine resale business requires many supplies. To determine the amount of the loan a small business will need to be able to pay all of its costs during the first few years of operation, you first need to list all of these supplies and total their approximated costs. Start up costs entail all of the supplies you will need to buy only once, until they are so worn that they need to be replaced. Other supplies which need to be paid for or replaced regularly as they run out should be approximated as to how frequently they need to be repurchased, and the cost of this totaled. Below are listed all of the supplies and costs entailed which would be necessary, to the best of my knowledge, for a jumper resale business.

Start up costs:

Girths (4):	\$240
Saddle:	\$2000
Bridles (3):	\$360
Bits (8-10):	\$300
Polos (4 sets):	\$80
Open front boots (3 sets):	\$270
Rear ankle boots (3 sets)	\$100
Running martingales (2):	\$120
Saddle pads (5):	\$125
Standing wraps (4 sets):	\$160
Stable bandages (4 sets):	\$80
Crops (2):	\$40
Lunge lines (2):	\$40
Lunge whip:	\$20
Water buckets (8):	\$80
Curry combs (2):	\$10

Medium bristle brushes (2): \$15

Soft brushes (2): \$15

Mane/tail brushes (2): \$10

Hoof picks (2): \$4

Mane pulling combs (2): \$2

Razors for mane (2): \$6

Scissors (2): \$15

Clippers and blades (10's and 15's): \$190

Stud chains (2): \$15

Turnout blankets (8, varying sizes): \$1200

Jumps: \$10,000

Truck: \$25,000

Trailer: \$15,000

Total: \$55497

Per horse, 6 months of supplies:

Cost of purchase: \$2000

Pre-purchase exam: \$400

Feed: \$930

Stall bedding: \$200

Self-care board: \$900

Farrier: \$360

De-wormer: \$36

	Vaccinations:		
	West Nile:	\$45	
	EEE/WEE:	\$15	
	Tetanus:	\$10	
	Rhino/Flu:	\$60	
	Veterinary expenses:	\$400	
	Shampoo:	\$15	
	Hoof oil:	\$15	
	Rubbing alcohol:	\$5	
	Horse shows (2):	\$1074	
	Spray on detangler:	\$10	
	Fly spray:	\$10	
	Total:	\$6485	
es kept for six months will be priced at \$10,000, for a profit of \$3515. If planned correct			

Horses kept for six months will be priced at \$10,000, for a profit of \$3515. If planned correctly, twice the number of horses kept for six months could be bought and re-sold within a year's time. If four horses are kept for six months, then four more are bought and resold within another six months, making for eight horses within one year, total profit from these short term horses would be \$28,120.

Per horse, 9 months of supplies:

Cost of purchase: \$2000

Pre-purchase exam: \$400

Feed: \$1,395

Stall bedding:	\$300
Self-care board:	\$1350
Farrier:	\$480
De-wormer:	\$48
Vaccinations:	
West Nile:	\$60
EEE/WEE:	\$15
Tetanus:	\$10
Rhino/Flu:	\$75
Veterinary expenses:	\$400
Shampoo:	\$20
Hoof oil:	\$20
Rubbing alcohol:	\$5
Horse shows (2):	\$1074
Spray on detangler:	\$15
Fly spray:	\$15
Total:	\$7682

Horses kept for nine months will be priced at \$12,000, making for a profit of \$4318. If four horses are kept for nine months and resold at this price, profit would be \$17272. Added to the profit from the short term horses, the total profit would be \$45,392.

Budget:

Year One:

Net profit: \$45,392

Start-up costs: \$55,497

Taxes: 0.28 (\$45,392) = \$12,709.76

Social security: 0.0765 * 2 = 0.153 (\$45,392) = \$6,944.98

Personal expenses: \$14,400

End of year one balance: -\$44,159.74

Year Two:

Net profit: \$45,392

End of year one balance: \$44,159.74

Taxes: \$12,709.76

Social security: \$6,944.98

Personal expenses: \$14,400

End of year two balance: -\$32,822.48

Year Three:

Net profit: \$45,392

End of year two balance: \$32,822.48

Taxes: \$12,709.76

Social security: \$6,944.98

Personal expenses: \$14,400

End of year three balance: -\$21,485.22

Year Four:

Net profit: \$45,392

End of year three balance: \$21,485.22

Taxes: \$12,709.76

Social security: \$6,944.98

Personal expenses: \$14,400

End of year four balance: -\$10,147.96

Year Five:

Net profit: \$45,392

End of year four balance: \$10,147.96

Taxes: \$12,709.76

Social security: \$6,944.98

Personal expenses: \$14,400

End of year five balance: \$1,189.30

Final Summary

The best conclusion reached from this project is that it is possible to improve the value of a horse from less than \$2,000 to \$10,000-\$15,000, thus turning a profit over a short time span of 6-9 months. However, a resale business based on this profit of value should only be attempted when the economy is in a better condition, with promise for improvement and demand in the equine market. If the projected market is promising enough to allow for someone to begin a resale business and pay off all loans within five years, then it would be potentially possible to be successful long term with such a business. Ideally after the loans are paid off net profit would increase significantly and money could be put into savings and be used for living expenses when the market became poor.

However, consideration would still need to be made as to how to supplement income during years of economic downturn. Since the main skill used in this business is training horses, it would be more economically stable to make money by offering those services to owners of other horses, and potentially giving lessons. The greatest concern with a transition between training your own horses to training those of others would be to ensure that people knew of the availability of your services. Strong connections with other local and national equine professionals would be very important and helpful in this endeavor.

To minimize loss, at any point, if the economy begins to look like it might be getting worse, all horses should be sold and no more purchased until the economy and market demand begin to improve. While this might result in a financial loss, the goal would be to minimize the loss. If the value of horses on the market were to continue to decline, continuing to train and pay for board and feed on the resale horses for the planned timeframe of 6-9 months would require more monetary investment. Therefore, keeping the horses for the full 6-9 months would be a greater financial loss than selling them right away for less than what they could potentially be worth with more training.

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