

JEC ARISTOTLE BALLOU, AUTHOR OF *55 CORRECTIVE EXERCISES FOR HORSES*

# 33 Strength and Fitness WORKOUTS FOR HORSES



Practical Conditioning Plans Using Groundwork, Ridden Work, Poles, Hills, and Terrain

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## Structuring Your Week

**R**egardless of whether the goal is to maintain a horse's fitness or increase it, you cannot do the same thing every day. Otherwise, as I explained in chapter 1, the body *loses* strength over time. Further, repetitive activity tends to weaken motor nerve signals, and as a result, diminishes the power a muscle can generate. Likewise, soft connective tissues like fascia begin to form adhesions, which limits their stretching and “gliding” properties. Range of motion shrinks, and previous movement patterns can be altered.

Fitness planning can be categorized as “hard days” and “easy days.” The hard days deliver stimulus needed to make gains, whereas the easier days enable the body to absorb the training. Without sufficient stimulus or harder days, fitness plateaus and eventually wanes; without easy days, the body ends up in a state of constant stress and cannot absorb training

stimulus. In sum, some days need to be quite easy while others should be strenuous.

This offers the horse the spectrum needed, both mentally and physically, to make physiological adaptations. Many riders tend to spend too much time operating on one end of the spectrum, either accumulating large volumes of relatively easy work or pushing through hard workouts day after day. Neither of these scenarios results in sustainable strength gains.

A general rule of thumb for the weekly training sequence goes as follows: *easy, moderate, hard, repeat, rest*. In other words, your week might look like this example.

### MONDAY

*Easy.* 35 to 50 minutes of light aerobic schooling, nothing mentally taxing or physically difficult.

### TUESDAY

*Moderate.* 45 to 60 minutes of schooling including skills that are new or challenging to the horse.

### WEDNESDAY

*Hard.* A good day to do a workout from this book.

### THURSDAY

*Easy.* A repeat of Monday, or a 60-minute trail hack on mostly flat terrain.

### FRIDAY

*Moderate.* Repeat Tuesday, or try a lower intensity workout from this book.

### SATURDAY

*Hard.* A good day to do a long but low-intensity session (alternatively, do a shorter but more intense one). This can include a two-hour or longer trail ride, a double schooling session, or trailering out to a new location to school.

### SUNDAY

*Rest.*

## WORKOUT 1

# Step-Ups and Transitions



**4.3 A-D** Step-Ups (A), Step-Downs (B), Up-and-Overs (C), and Lateral Yields (D).

**DURATION:** Approximately 25 minutes

**KEY EXERCISES USED:** Step-Ups (p. 28), Step-Downs (p. 29), Up-and-Overs (p. 30), Lateral Yields (p. 31)

**BENEFITS:** This workout is terrific for releasing tension in the horse's shoulders while improving coordination. It is useful during times of poor weather or an active rest day. While the movements are meant to flow continuously, you can allow brief pauses when the horse shows signs of significant tension release (chewing, sighing, eyelid twitch) during the Step-Ups. Allow the release to happen and then carry on.

### HOW-TO:

1. For 10 minutes: Walk at brisk pace without stopping.
2. For 2 minutes: Walk 10 steps, stop, back up 6 steps; repeat sequence.
3. For 3 minutes: Walk-to-jog transitions (every 10 steps). *Ideally, jog alongside your horse on mostly straight lines.*
4. Do 10 reps of Step-Ups.
5. For 2 minutes: Repeat Step 3.
6. Do 10 reps of Step-Downs.
7. Do 10 reps of Up-and-Overs.
8. For 1 minute: Walk at brisk pace.
9. For 45-seconds: Do Lateral Yields in each direction. Repeat twice.
10. Finish by performing any stretches you wish, or five minutes of easy jogging.

### WORKOUT 2

## Mobility Magic

**DURATION:** Approximately 35 minutes

**KEY EXERCISES USED:** Back-Up (p. 27), Turn-on-the-Forehand (p. 32), Turn-on-the-Haunches (p. 33), Tight Serpentine (p. 34)

**BENEFITS:** This session can be performed pretty much anywhere with moderately level ground. It can help loosen areas where horses often hold tension. These gentle maneuvers can activate the *postural muscle system* (sensory pathways that transmit information to the central nervous system, thus controlling posture).

### HOW-TO:

1. For 10 minutes: Walk, making speed changes every 15 strides (slow, medium, very fast).
2. Back the horse up 30 steps.
3. For 2 minutes: Walk-to-stop transitions (every 10 steps); repeat.
4. Turn-on-the-Forehand 3 times in each direction.
5. For 2 minutes: Easy jog on straight lines and big circles.
6. Turn-on-the-Haunches 3 times in each direction.





**4.4 A-D** Back-Up (A), Turn-on-the-Forehand (B), Turn-on-the-Haunches (p. C), and Tight Serpentine (D).

7. For 2 minutes: Walk briskly.
8. Repeat Steps 4 through 6.
9. For 2 minutes: Walk Tight Serpentine.
10. For 30 seconds: Lateral Yield in each direction. Repeat twice.
11. Finish with your favorite stretches, liberty play, or turnout for extra movement.

**TIP:** Aim to perform a full 360-degree turn unless your horse is just learning, healing from a lower limb or hoof injury, or particularly stiff, in which case perform a 180-degree turn.

# 6

## Hills and Terrain Routines (More Mileage That's Mild, Less Steep and Deep)

**H**ills offer indisputable conditioning potential, but their benefits rely on approaching them with a plan that is relevant to a goal. In the case of building strength, there is no guarantee of results by making your horse occasionally climb inclines that leave him winded and sweaty. When using terrain to strengthen locomotive muscles, slope angles and repeatability of efforts, plus strategic rest intervals, play an enormous role.

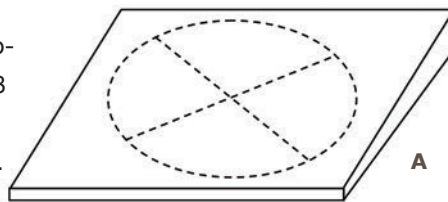
By itself, traipsing around steep terrain with a hope of strengthening the horse often brings cardiorespiratory improvement without intended strength. This is due to hills being too steep and encouraging poor form or overexertion, insufficient repetitions, unproductive work-to-rest ratios, or working

past fatigue. Due to the sheer physical challenge, climbing steep hills often contributes to asymmetrical movement patterns and pushes the horse to an anaerobic metabolic rate that does not support the muscle fiber recruitment and adaptations sought for bettering locomotion and balance. Further, eccentric muscle loading, which happens during descents, produces more metabolic waste (acidic buildup, “burning” sensation) than other types of fitness activities, and can lead to poor function and recovery.

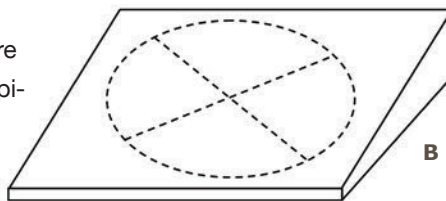
Take heart if you lack access to steep hills. Aside from very specific conditioning goals, steep climbs are generally not used for strength workouts targeting basic strength gains. Also, rest assured that you do not need access to miles of hilly terrain. In fact, many of the following workouts prefer mild slopes that allow for repeatable dosages. An ideal slope angle will require the horse to change his center of gravity, flex his joints more, and engage his topline and bottom-line muscle chains with greater force. Most pastures have a swale or rise that fits this description.

For the purposes of clarity and prescription, the workouts in this chapter use the following profiles.

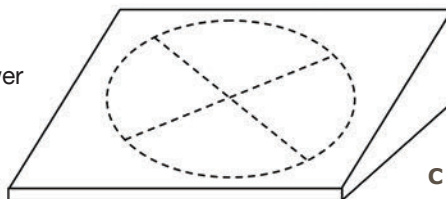
**10 Mild Slope**—A gentle uprising that progressively gains height; terrain gains 6 to 8 vertical feet over 100-foot distance. Many driveways and pastures fit the description.



**11 Moderate Slope**—This requires more effort; the horse needs to use shorter, more powerful strides to ascend. Heart and respiratory rate will increase notably after a few hundred feet. Terrain gains 8 to 10 vertical feet over 100-foot distance.



**12 Steep Slope**—A type of hill that requires automobiles to downshift to lower gears; terrain gains 15 to 20 vertical feet over 100-foot distance.



**6.1 A–C** Mild slope (A), moderate slope (B), and steep slope (C).

If you lack access to slopes that fit these exact profiles, perhaps you have at least a gentle upswell, berm, or ditch. The longer uphill reps cannot be performed in this case, but the workouts that call for maneuvering around and across a mild slope certainly can.

## Modifications

### In-Hand

Several of the workouts in the pages ahead could be adapted to perform in-hand if that works better for your terrain and horse's current level of training or fitness. When modifying for this purpose, be sure to keep the horse's neck aligned straight in front of his body rather than curved toward you. The horse's body needs to be aligned when training on slopes or there is the possibility of strengthening asymmetrical movement, rather than achieving the fitness goals you want.

### Rehab Cases

Many of these hill workouts can also be modified to serve horses in physical rehab. By adjusting reps and overall duration, they offer good settings for reawakening neuro-motor activity, proprioception, and body control. Work with a vet or sports therapist to modify the routines to fit within a prescribed rehab plan.

### Senior Horses

Owners of senior horses often wonder if or when they should stop riding hills. My advice is to really listen to your own individual horse. First, no unfit senior should be ridden up and down hills. Without fitness, the effort of hills brings a lot of strain and the possibility for negative forces on joints. Especially in the case of arthritis, a horse should have at least a little fitness before enjoying hilly rides. When fitness exists, hills are not *necessarily* an uncomfortable experience for an older or arthritic horse. My general rule is to let each horse tell you. Most horses will get to a point where they can no longer ride hills, but this might be a lot later than you expect. Do not pre-emptively decide your horse is too old to ride on hills until he or she has given you very clear reasons. If you treat horses like they are "old" by limiting activities based on their numeric age, they will become old. If, on the other hand, you read their bodies and attitudes

**H**oneyB was a four-year-old Mustang with stifles that locked and slipped so much that her owner was beginning to worry she had no future. HoneyB's owner likes to ride on remote backcountry trails in Utah and Montana, and she had hoped HoneyB would develop to be her next trail mount. But whenever the little mare trotted or stepped laterally, her stifles locked, and she did not want to move. She became reluctant to be ridden, and the quality of her movement did not improve, even though her owner tried to address the issue. She had been advised to "ride hills," but without clearer prescriptions to follow, HoneyB got worse instead of better.

Her owner reached out to see if I had any ideas. I suggested she take a more progressive approach to HoneyB's conditioning. While hill work was indeed the goal, I wanted to ease into those efforts after laying a foundation of exercises that would require stability from HoneyB's stifles but not irritate them. I recommended a plan that included two weeks of daily groundwork emphasizing exercises like Step-Ups (p. 28), Raised Uneven Poles (p. 36), and an increasing number of Back-Up steps, plus Two-Mile

## Success Story

Hikes in-hand (p. 64). Following this, HoneyB's plan shifted to incorporate pre-ride mobility drills and light riding daily. Most of the riding at this point was done at walk with controlled segments of easy jogging. By Week Four, we also began incorporating mild hill workouts at the walk. Specifically, I recommended the 45/20 (p. 97) and Zigzag Hills (p. 96). By the end of Week Four, HoneyB's trail outings, which were on mostly flat terrain, were up to nearly 3 miles, and she was fulfilling all activities without stifle problems. Now we had a foundation we could build on.

For the next four weeks, we adjusted HoneyB's plan to increase the duration of each session, add more trotting and some cantering, and incorporate a weekly workout from this chapter. HoneyB continued to absorb the training with positive results and offer good energy. I am happy to report that at the time of writing, she and her owner were planning a summer of long trail rides in Montana, and her stifles were giving her no problems.

and fitness levels, as opposed to their years, they might not “act their age” until past a surprising point.

The signs I look for to determine if hills should be avoided with an older horse are *consistent* expressions of discomfort or struggle. This includes a persistent unwillingness to travel down hills straight (that is, the horse always wants to shift his hindquarters to one side), an inability to maintain steady rhythm down hills, excessive tripping and stumbling, an abnormally high heart rate on moderate slopes, and repeated balkiness. When these kinds of signs show up repeatedly, it might be a good time to avoid hills and to make fitness gains with other routines. Or it might be time to seek out different gradients. Even if your horse can no longer ride steep slopes, it does not mean that mild ones are out of the question.

## Rider's Role

A general rule of thumb when riding slopes is to keep your own body parallel with nearby trees. This will mean a *slight* incline or recline of the torso, depending on the angle of your slope. This is not an exaggerated lean; it will hinder the horse to move your weight far ahead or behind his center of gravity near the withers.

Also pay attention to the position of your lower leg. It is common, when riding with long stirrups, for the lower leg to swing forward near the horse's shoulders when descending hills. This is disadvantageous to the horse as it causes the rider's seat to sink more heavily into the back of the saddle. Adding pressure or tension here impedes the ability of the horse's hind legs to step freely forward under the horse's body. Similarly, when riding up hills, riders who lean too far forward inadvertently swing their lower legs back toward the horse's flanks. As a result, these riders tip more weight toward the front of the saddle, sometimes clenching with their knees, and end up ahead of the horse's center of gravity. Our goal when riding hills should be to remain as balanced in the saddle as possible without an exaggerated lean either forward or backward. We also want to keep our heels below our hips rather than displacing our legs forward or backward. Hills are hard enough for horses; we do not want to add burden by requiring the horse to find balance under our own misaligned bodies.

## Horse Form

As with most training exercises, the horse will benefit most from being in good balance and posture on hills. This does not mean he should look like an advanced dressage competitor, but we also do not want him lollygagging around with a hollow topline or his neck twisted to one side or hanging down to the ground. An ideal posture allows the horse to bear weight equally over all four legs and to shift weight easily from front end to hind end, *and vice versa*. For most horses, this is a posture where the topline is horizontal to the ground, with poll and withers and sacrum nearly level. This is sometimes referred to as a *natural balance*, or one that resembles an elongated, gently arched rainbow.

## Adapt to Your Terrain

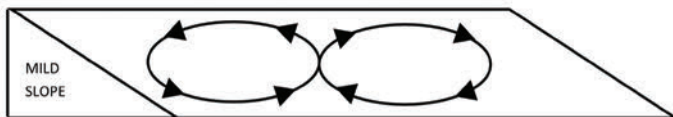
Many of the following workouts ask you to travel up and down the same slope. Depending on your situation, this might not be possible. Your hill might be too narrow to turn around on or perhaps your footing might get slippery with repetitive travel. Or maybe your horse gets antsy and unsettled by repeating the same terrain up and down. It might suit you better to plan these workouts somewhere that allows you access to a sequence of hills nearby rather than trekking up and down the same one. If this is the best option, do it even if it means your interval durations might not match the workout assignment. It is far better to modify the workout slightly to fit your situation than to skip it. The same applies to the steepness of your terrain. If a workout asks for a moderate slope but you only have a mild one, just go ahead and use what you have. There is still value in the structure, timelines, and tasks given in each workout even if your available terrain does not entirely match the description. So go ahead, get creative, and get out there.

## WORKOUT 22

# Slope Figure Eights



**6.2:** Slope Figure Eights (A). During rests between work sets, halt your horse facing down the slope (B).



**DURATION:** Approximately 40 minutes

**SLOPE:** Mild

**BENEFITS:** Ride the figure-eight pattern on the side of a hill with as much precision as you would in the arena, aligning the horse's spine to the inward curve of each arc on your figure. This requires the horse to frequently adjust his balance and stabilize his trunk and pelvis. It is dependent on the horse paying close attention to his rider's seat cues.



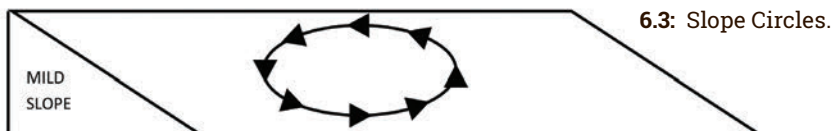
### HOW-TO:

1. For 12 minutes: Warm up on flat ground (arena, road, or field). Then proceed to the slope.
2. For 3 minutes: Jog a figure-eight pattern across the face of the slope.
3. For 10 seconds: Rest at a halt, facing your horse downhill.
4. Repeat steps 2 and 3 twice more.
5. Finish by walking 8 minutes on flat ground (arena, road, or field).

**TIP:** If the footing quality is suboptimal or your horse seems initially wary and unbalanced, modify by walking sections of the figure. For instance, jog the uphill portions and walk the downhill portions, or keep transitioning between strides of both gaits until you're able to sustain a steady jogging rhythm. With some skilled footwork, this workout can also be performed as groundwork.

## WORKOUT 23

# Slope Circles



**DURATION:** Approximately 40 minutes

**KEY EXERCISES USED:** Back-Up (p. 27)

**SLOPE:** Mild

**BENEFITS:** By requiring the horse to make frequent postural adjustments, this ridden version of the Terrain Training Workout from chapter 4 activates stabilizing muscles while strengthening larger gymnastic muscles.

### HOW-TO:

1. For 10 minutes: Warm up on flat ground, including several reps of backing up and transitions between walk-stop-trot. Then proceed to a hill with a mild slope.