

Workout #71: Plyometrics

Objective: To increase muscle power as part of the athlete's supplemental training.

Description: Athletes should begin with two sets of 10 reps of each exercise, progressing to four sets, with full recovery between sets.

Coaching Points:

- Plyometric exercises should always be performed on soft surfaces with good footing, such as grass, artificial turf, or wrestling mat.
- Precede a plyometric workout with a general warm-up that gradually gets more intense.
- Athletes should concentrically contract their muscles immediately after eccentrically contracting them by trying to spend as little time on the ground as possible between hops, bounds, and jumps.
- High-intensity plyometric exercises, such as depth jumps and box jumps, should be included in the athlete's program only after mastery of lower-intensity and moderate-intensity exercises (e.g., single-leg hops, leg bounds, and squat jumps).

Single-Leg Hops

On a grass field or other soft surface, the athlete should do three hopping exercises on one leg at a time: hop up and down (Figures 71-1 and 71-2), hop forward and back (Figures 71-3 and 71-4), and hop from side to side (Figures 71-5 and 71-6). The focus of these hops is the ankle joint, with the power coming from the gastrocnemius muscle in the calf.

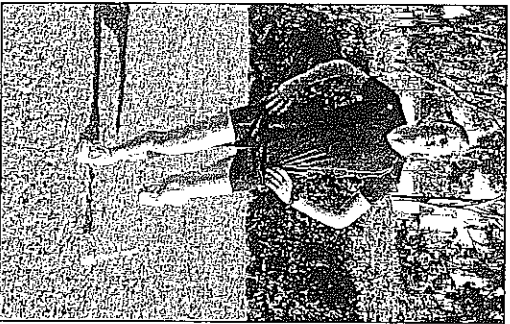


Figure 71-1

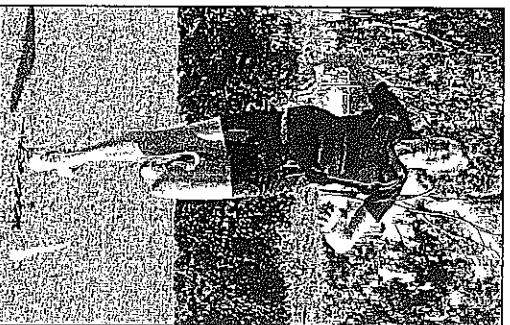


Figure 71-2

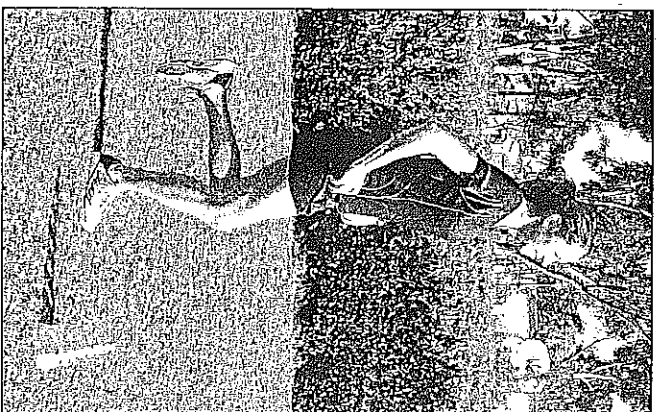


Figure 71-3

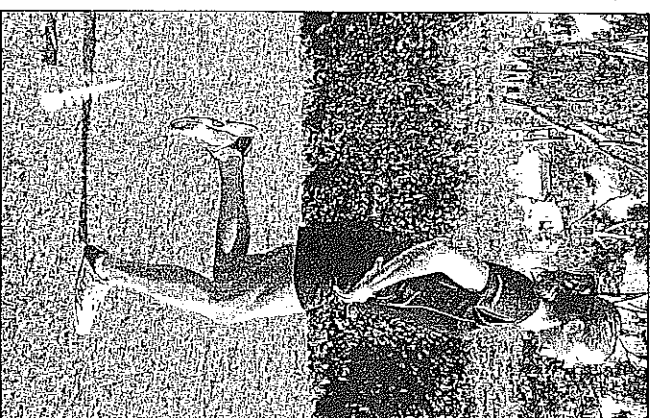


Figure 71-4



Figure 71-5

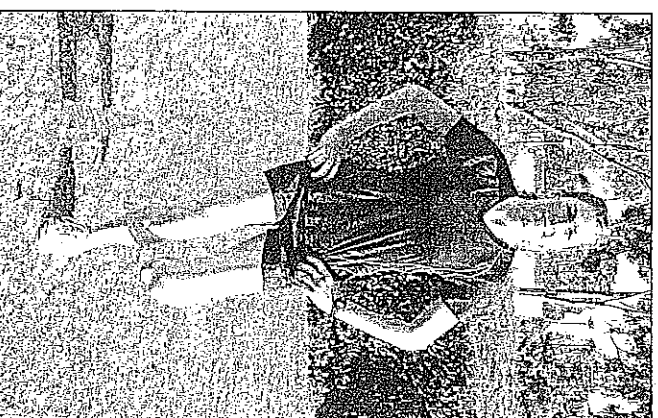


Figure 71-6

Double-Leg Bound

The athlete should bend her legs in a squat position with her thighs parallel to the ground (Figure 71-7). She should jump forward with both legs as far as possible (Figure 71-8) and land in a squat position (Figure 71-9).

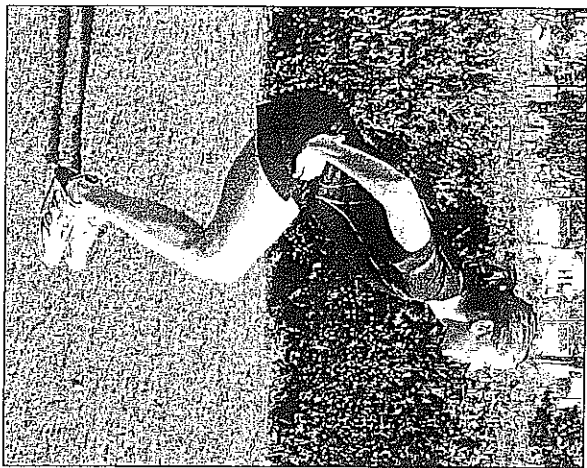


Figure 71-7

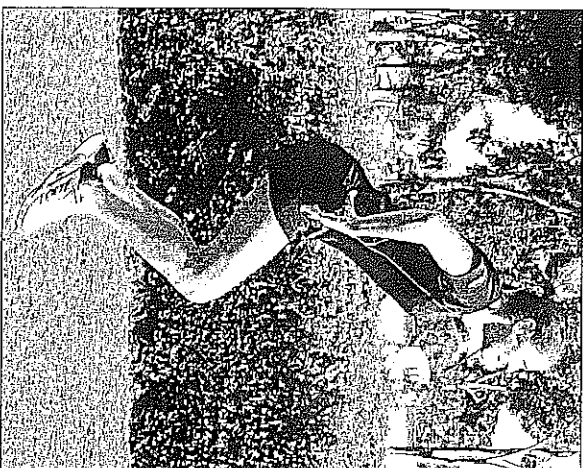


Figure 71-8

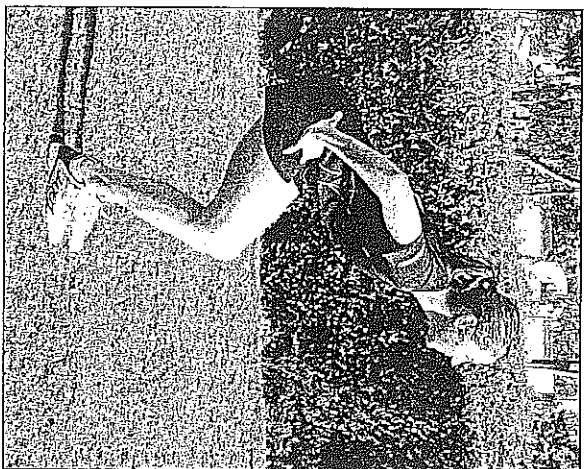


Figure 71-9

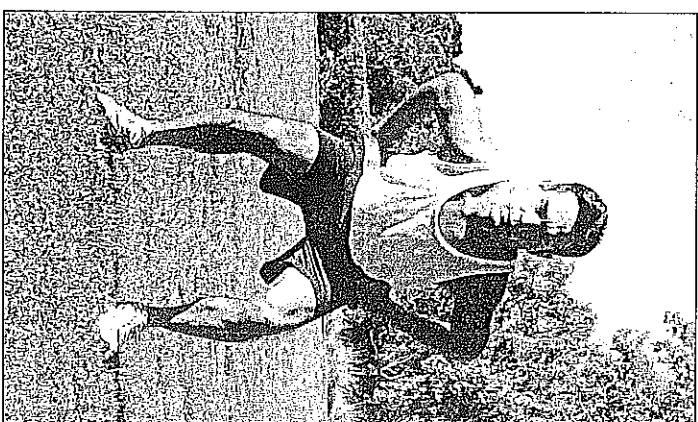


Figure 71-10

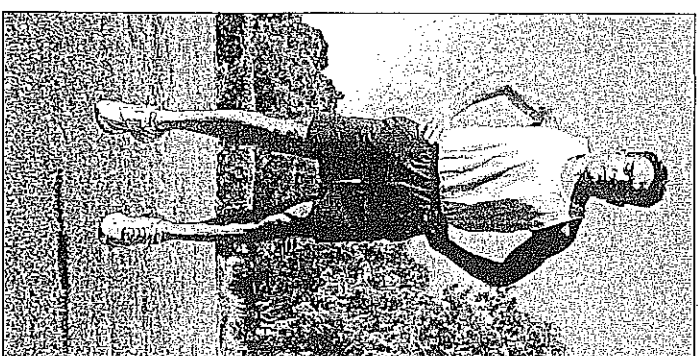


Figure 71-11

Squat Jumps

The athlete should begin with hands on his hips in a squat position (Figure 71-10). He should jump straight up as high as possible (Figure 71-11). Upon landing with soft knees, he should lower back into a squat position in one smooth motion, and immediately jump up again.

Depth Jumps

From a standing position on a two-foot-tall box (Figure 71-12), the athlete should jump onto the ground and land in a squat position (Figure 71-13). From this squat position, she should jump straight up as high as possible (Figure 71-14).

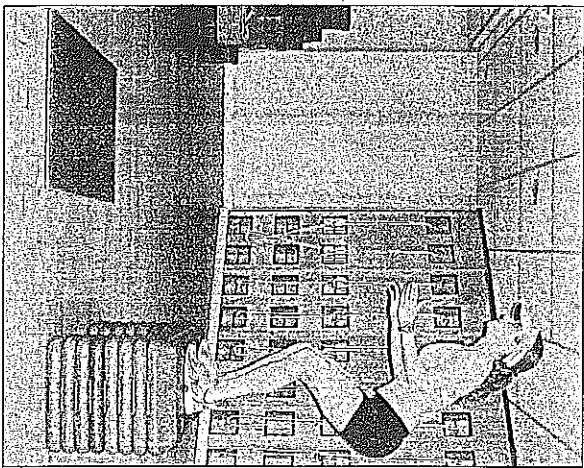


Figure 71-12

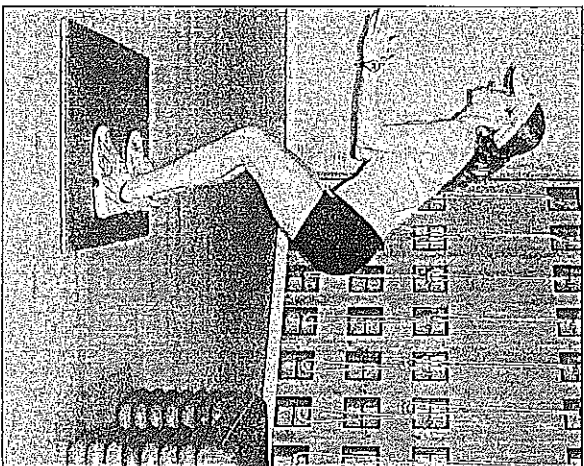


Figure 71-13

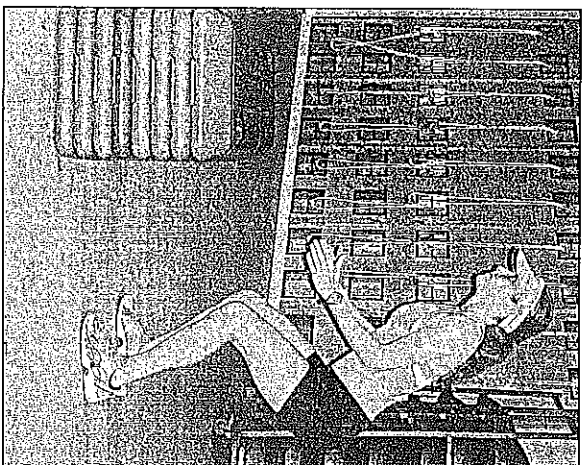


Figure 71-15

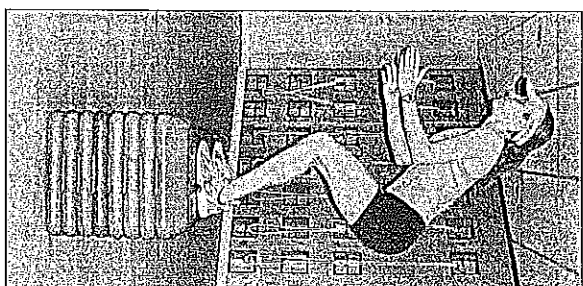


Figure 71-16

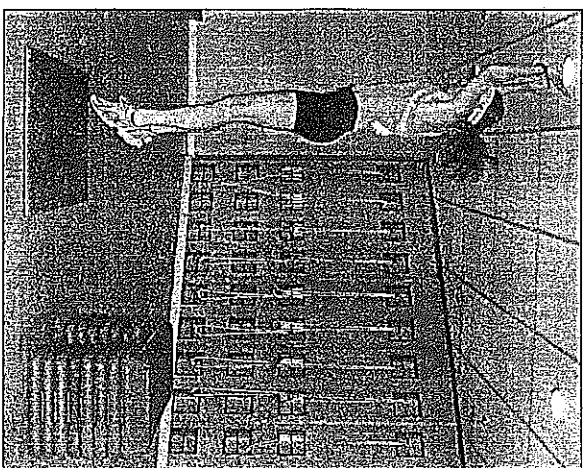


Figure 71-14

Box Jumps

The athlete should stand with feet shoulder-width apart and knees bent in a squat position in front of a box about two feet high (Figure 71-15). She should jump with two feet onto the box (Figure 71-16). She should immediately jump into the air and back down to the ground on the other side of the box, landing in a squat position (Figure 71-17). As she gets experienced with the exercise, she can try jumping with one foot at a time.

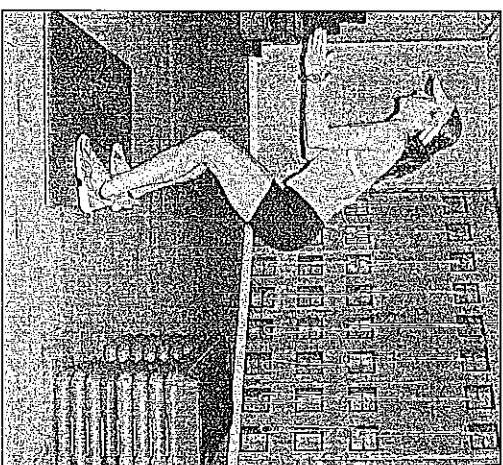


Figure 71-17