

Training & Drills for Long Jump

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Training

When developing your training plan think backwards. Where do you want your athlete(s) to be at the end of their competitive season?

- Plan out each week
- Think in 4/5 week cycles
- Should have 3 to 4 of these cycles

Things to consider when developing your training program....

- Emphasis of on-ground mechanics - Spend 90-95% practice time rehearsing the fundamentals that happen on the ground
- Skills are taught from a remedial stage to a more advanced stage until the skill is mastered.
- Spend most of practice time focusing on the approach and the take-off

Training for the long jump should include the following.

Strength qualities -

Absolute Strength, General Strength, Power, Elastic Strength, Strength Endurance

Speed related qualities -

Acceleration, Absolute Speed, Speed Endurance, Optimal Speed

****Work acceleration early and often!**

****Absolute Speed and Speed Endurance should also be worked into the training plan.**

Endurance related qualities

Aerobic, Anaerobic, Work Capacity

Flexibility related qualities

Active, Passive, Kinetic

Coordination related qualities

Agility, Mobility, Balance, Technical Execution

Recovery days!!! Each athlete needs recovery days/week. Build in days or a full week of recovery. This will help ensure that the athlete stays healthy and the body adapts to the training that you are having them do.

- Pool work
- Bike
- Stretching and rolling out
- Yoga
- Etc...

Testing – Testing is a good way to see if your training is doing what you want it to do. Also giving the athlete a chance to see improvement. Do this 2-3 times a year. Good way for you to make adjustments in your training plan. Keep records for each of your athletes.

- Over head shot put
- Underhand shot put
- Standing 30m
- Flying 30m (10m run in)
- Standing LJ
- Standing three double leg jumps

Drills

Be sure that each drill has a purpose. Don't just do drills to do drills. Athletes must learn to master the basic drills of the take off!!

When training for the long jump make sure that you as the coach work on training each side of the body. Being over-developed on one side can lead to problems in the jumps.

Be sure you are working on good posture the entire year!! Good posture leads to good jumps. Bad posture can lead to bad jumps.

Approach runs are a must. Work up to developing meet approach length.

- Start off the runway first
- Move to runway
- Approach runs with a pop up
- NO FULL JUMPS IN PRACTICE

Master basic skills early and continue to work on them throughout the entire year.

- Prep for take-off
- Take-off
- Landing

Short approach jumps vs. Full approach jumps.

- Less stress on the body
- More jumps
- Due to slow nature of the short approach jump this makes the athlete have to do things correctly.
- Off the board
- Off a box
- Off an incline box
- Off a spring board

Plyometric Exercise are a good tool for any jumper. When incorporating these exercises be sure to consider the athlete's ability, age, and training age. Contacts per training session will be different for each athlete. Error on the safe side and do less contacts if need be. These exercises can include.

- Short bounds – double or single leg
- In place jumps
- Extended bounds
- Depth Jumps

Approach Drills

- *Wall Drill (walking)
- *Wall Drill (jogging)
- *Roll over Starts (15m-20m)
- *Full Approach runs on the track (NO BOARD) no jump
- *Full Approach runs on the runway no jump
- *Full Approach runs on the runway with small pop up

Takeoff Drills

- *Skip for height (Heal to Toe action)
- *Skip for distance (Heal to Toe action)
- *Continuous fast leg paw back with take-off foot (15m)
- *5/6 foot take-off drill (Heal to Toe action)
- *Run, Run, Jump
- *Run, Run, Jump (takeoff foot)
- *Run, Run, Jump (penultimate foot)
- *Run, Run, Jump (lowering of the body)
- *Run, Run, Jump (w/arms)
- *Continuous takeoffs over 5 hurdles
- *One step roll over take-off foot into sand
- *Three step roll over take-off foot into sand w/landing
- *Five step roll over take-off foot into sand w/landing
- *Short approach jumps (3-5 steps)
- *Short approach jumps w/box (3-5 steps)
- *Short approach jumps w/penultimate step on box

Landing Drills

- *Standing Long Jump (gymnastic landing)
- *Standing Long Jump (Squat)
- *Standing Long Jump (Kick out)
- *Standing Long Jump (Landing)
- *2 step landing

Plyo Drills

1. **SIDEWAYS BOX DRILL** – to be done over 30/60 or 90 seconds. It is very explosive and the jumper must ensure that the contact time on the floor is minimal and that maximum height is attained on each drive from the floor.
2. **ALTERNATING PUSH OFF** - The jumper places his foot flat on top of the platform. The jumper then drives vertically upwards and must attempt to go as 'high as possible' to land on top of the platform. The jumper then re-sets and repeats the drill on the other leg. You could do 5 sets of 5 per leg.
3. **HURDLE HOPS** - Set out a number of hurdles [the height dependent on age and experience of jumper]. The jumper drives two-footed over the hurdles attempting to go for maximal height and limiting flexion at the knee on landing and DRIVING back up immediately on landing. Always maintain an upright upper torso. You could do 6 sets over 6 hurdles with 1 minutes recovery between each repetition.
4. **DROP DOWN REBOUND** - The jumper 'steps' down - not out from a platform 60-90cms high, and on landing on a full foot DRIVES immediately upwards. There should be no forward lean on landing. The energy stored in the muscles as they lengthen MUST be used immediately
5. **DROP DOWN REBOUND TO SECOND BOX** - The jumper 'steps down' and on landing on a full foot DRIVES immediately upwards VERTICALLY from the floor and lands on the top of a second platform. You could extend the drill by using several platforms of varying heights. You might want to go from a lower platform to a series of higher platforms.
6. **DROP DOWN REBOUND TO ATTEMPT TO TOUCH OBJECT**- The jumper will attempt to touch an object which is positioned high. In this example the jumper is rebounding quickly in an attempt to touch the rim of a basketball net.
7. **DROP DOWN REBOUND with a dynamic 'vertical impulse' over a hurdle** – The jumper 'steps down' and on landing on a full foot drives vertically over a hurdle. The hurdle height is determined by age and experience. Remember, the jumper has to REACT QUICKLY on touchdown and drive up and use the stored elastic energy IMMEDIATELY. Ensure that the landing after the hurdle clearance is firm and balanced. There should be no excessive drop of the hips.
A progression would be to place several hurdles in front of the platform.
8. **DROP DOWN REBOUND followed IMMEDIATELY with a Standing Long Jump for distance** - The main aim is to react immediately on touchdown and to DRIVE horizontally upwards and forwards. I tend to measure some of the repetitions from the toe to heel.
9. **Double footed bounding over a designated distance OR a set number of repetitions** - The jumpers must limit the flexion behind the knee, keep upright and react IMMEDIATELY on landing on a full-foot and initiate a dynamic vertical impulse attempting the extend and straighten both legs on the 'upward journey'. I'm looking for height as opposed to distance.
10. **Jump up to platform** - The platform is 90cms high and the jumper is lowering his hips slightly then EXPLODING upwards quickly to land on top of the platform. Start at 60cms and build up to 90cms+ gradually. There should be no excessive drop of the hips to initiate the vertical impulse.
11. **Standing Long Jump to vertical DRIVE upwards on to a platform** [height depends on age and experience] - The jumper performs a standing long jump to a raised platform. IMMEDIATELY on landing the jumper changes his direction from the horizontal to the vertical. The jumper MUST try to go as high as possible and extend and lengthen the legs in the vertical impulse. You will note that the second repetition is by far the more efficient.
12. **DROP DOWN to FREEZE POSITION** - Some research indicates that you need only perform the eccentric action without the following concentric action. I do this as a warm up but the majority of my drills have an eccentric [lengthening] action closely followed by a concentric [shortening] action.
This isolated eccentric action still LOADS the muscle as it's lengthening.
13. **Moving Alternate Split Squat** - This drill is very demanding especially if you do 4 sets of 4-6 repetitions. Body positioning is very important - the jumper must try to keep his upper torso upright. I would have liked him to be a little bit more explosive in moving from one split squat to the next so we'll film this again very soon and you'll be able to see the difference.
14. **ONE LEGBOX JUMP** – The jump hops from the floor up to a platform whose height is determined by the age and experience of the jumper. Both legs should be worked. The aim is to DRIVE VERTICALLY from the floor before landing on top of the platform.
15. **ONE LEG HURDLE HOPS** – The jumper does a series of driving hops over a series of hurdles. The aim is to 'touch and go'. Again, posture is important. You can see that he catches his trailing leg on one of the hurdles. It's just a reminder that all exercises need total concentration on each repetition. A lot of the exercises are skill-based so the coach must ensure that correct posture and mechanics are adhered to.
16. **Single leg bounding** - x 5 both legs
17. **DYNAMIC SPLIT SQUAT DRIVE** - In this drill the jumper gets into a wide split-squat position. With minimum sink to the ground he DRIVES VERTICALLY upwards from both feet attempting to achieve maximal height. On landing he must ensure that he does not sink towards the floor. He has to maintain a very strong split shape. On landing he DRIVES BACK VERTICALLY.
He is showing a variation in that he is exchanging his legs at the apex of the vertical impulse.
You might look to have your jumper doing a 3 sets of 5 with 1 minutes recovery between sets.
18. **THE HORIZONTAL TO VERTICAL DRILL** In this drill the jumper is demonstrating a standing long jump to land and immediately on landing -driving vertically attempting to achieve maximal height with NO MOVEMENT IN A FORWARDS DIRECTION. Again, the jumper is adhering to the ply metric principles of loading the relevant muscle groups as the muscle is lengthening [the stretch-shortening cycle]. In this demonstration I would have liked Gareth to have landed a little higher from the horizontal impulse. I look for landings that replicate the take-off angle at the moment of touchdown and take-off. Here he has completed 3 reps. A typical drill would have the jumper doing 2 sets of 6 reps with 1 rep being a long jump with a vertical impulse. Recovery would be 2 minutes between sets
19. **Standing long jump into one Hurdle hop**
20. **Standing long jump into two hurdle hops**