

THE STEEPLECHASE

#### Why

- One of the most challenging events on the programme
- Adds interest / variety to training and competition
- Gives athlete (and coach) another option
- Hurdle skills add flexibility, strength, balance you may never race a steeplechase but adding it to your training repertoire can enhance the mentioned skills as well as adding interest to training.
- Hurdling is essential skill in crosscountry
- It's fun
- Develops strength / endurance / skills for crosscountry

#### The Event

- Consider it a 2000m/3000m hurdle race
- Hurdles is not a jumping event hurdles are run over, not jumped over.
- Demands strength of a 5000m, speed of 1500m, anaerobic capacity of 800m, skills of a 400m hurdler everything in one event!
- Generally, add 35 sec to 3k flat time for experienced runner, 45 second for novice

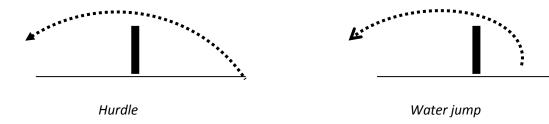
## Start with hurdling

- Hurdles is what sets a steeplechase apart, so start with hurdling.
- Hurdles v water jump emphasise that steeplechase hurdling and steeplechase water jump are separate skills. (See Diagram below)
- Both need to be learnt and practised.



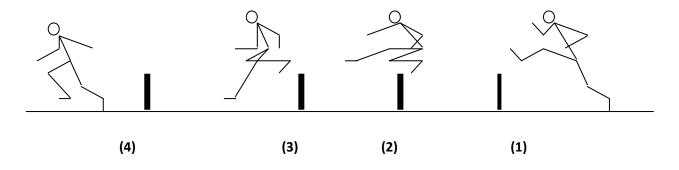


- Hurdle preferable to not have foot land on top of hurdle this loses time Hurdling requires a low, flattish trajectory with the athlete starting the jump from **as far out from the hurdle** as possible. (Running over hurdle)
- Water jump technique has the athlete taking off **as close** as possible while still running at the barrier (no braking action or pausing.)



# **Hurdle Technique - Overview**

- Lean into the hurdle (1)
- Pick up lead leg, driving knee up if observed from the front the lead leg is picked up and put down in a straight line.
- Tuck heel of trail leg into buttocks with knee towards armpit. (2)
- Bring trail leg across front of body into sprint position.
- Reach the opposite arm to lead leg across hurdle and hold other arm by side.
- Bring both arms into sprinting action on clearing hurdle.

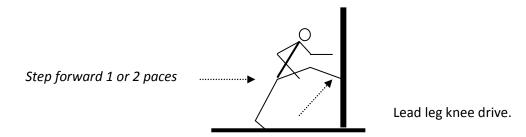


# **Learning Hurdling**

Hurdle skills should be learnt and practised with specific drills.

#### **Start with Static Lead Leg Drill**

- Start 2 or 3 paces out from a wall, fence or steeplechase hurdle
- Step into the wall or hurdle and drive lead leg up against the wall or on top of fence from a full pace out.
- Movement in and leg drive is aggressive.
- Back leg is straight but lead leg is slightly bent at knee.
- Leg drive is straight forward
- Opposite arm reaches forward and other arm driving back in sprint action.



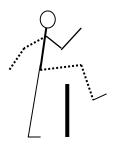
### **Static Trail Leg Drill**

- Set up a hurdle a short distance away from a wall or a fence so that the athlete can put the outside foot past the upright of the hurdle and lean forward and support their body weight against the wall.
- Extend the inside leg backward and pull it over the top of the hurdle. (A duplication of the action a trail leg does during a race)
- Ensure athlete looks ahead all the time.

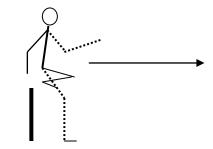
• As soon as foot has cleared the hurdle knee is pulled high up into chest the athlete pulls knee high up into chest

### **Active Trail Leg**

- Stand behind hurdle with lead leg over hurdle (1)
- Step forward, lead leg landing on ground, trail leg coming over hurdle and landing so athlete takes slow running step forward
- Take another step with lead leg to give continuous running action



(1) Standing position



(2) step down with lead leg - trail leg follows.

#### **Walkovers**

- Place several hurdles about 1m apart.
- Walk over each with emphasis on:
  - a) lead knee brought up high and put straight down
  - b) hips held high (no sitting in bucket, keep tall, high centre of gravity).
  - c) drill done on toes
  - d) trail leg brought around to front then lowered

e) correct sprint arm action.

(This is an excellent drill for all runners for promoting "running tall" and strong leg drive. It can be done with a medicine ball held directly above the head with straight arms – this increases difficulty.)

#### **Important**

- Essential that runner can hurdle with either leg all drills above should be done with right and left as lead leg.
- Do both in same session.

### Water jump.

Key to being effective over the water jump is to not lose rhythm and being able to retain running action on landing and emerging from the water. Points to emphasise and watch for:

- Accelerate into hurdle over final 8 or so strides, with the last stride before the barrier shortened. A long stride or reaching has a braking effect.
- Ensure last stride is not too short otherwise athlete jumps up onto barrier rather than running up onto it.
- Body leans in and lead leg drives up and forwards with bent knee. As with hurdle clearance, knee and foot goes straight up and down and not sideways if observed from the front. Lead leg knee drive drill is good practise for this.
- Lead foot instep lands front edge of hurdle, rolls over hurdle then push off and out, driving out over the water.
- Keep foot on top of hurdle as long as possible, allowing an effective drive forward.
- Drive must be forward and not up. Centre of gravity is kept low.



- Coach should watch athlete's head the more it stays on a level plane (i.e. no pronounced up and down movement over the jump) the better.
- Free (front) leg knee kept high as athlete drives off hurdle to avoid rotation of body. Lead leg stays on hurdle as long as possible, ensuring wide split of legs.
- Free leg is under centre of gravity on landing (make sure leg is not ahead of CG, which would be a braking action.) Knee gives slightly on landing to absorb impact.
- If available, vaulting horses and gym mats can be used to develop water jump technique.

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## **Training - Hurdles**

- Place 5 or 6 hurdles on track with different spacings between them. For instance, from hurdle 1 to hurdle 2 you might have 5 paces, but from hurdle 2 to 3 there are 8 paces. This ensures athletes are forced to become competent leading with either leg.
- Place 1 or 2 hurdles on track in a rep session (e.g. in a sessions of 1km reps runner can face 6 hurdles per rep.)
- As above but randomly move hurdle each lap.
- Have 4 or 5 hurdles in one lane up the track and 4 or 5 facing other way in a separate lane runner runs up, does U-turn, runs back. Athlete leads with one leg going up, the other coming back.
- Have 4 or 5 hurdles on women's 100m hurdle spacings this should be 3 paces between hurdles and forces athlete to attack each hurdle and stay on toes.

### **Training – Water Jump**

- Water jump practise can be done into sand –place a hurdle in front of the long jump pit.
- Barriers are often approached in a crowd and there can be jostling for position have athletes practise in a group, all attempting to go over the water jump at once.

• Many water jumps have a curved approach, practise by running into the jump on a curve.

### **Training – General**

- There are 28 hurdles and 7 water jumps in a 3000m steeple developing an efficient and energy saving technique obviously critical <u>but</u> the 78m between each barrier is where races are won or lost, tactics either worked or failed **in** short, it is still a distance race.
- Distance training still the basis requires high VO2max, aerobic conditioning and anaerobic capacity.
- Hurdle technique is an extra, the icing on the distance training.
- Introduce plyometrics (recommended for all distance runners.) Strengthens muscles AND tendons develop explosive power Foot drills for ankle strength Hops Hurdle bounds
- Higher demand for core stability/strength (something all distance runners should work on).
- Hills, hills and more hills

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