

# Fast Feet – A Necessity for All Players

Sean Hedger – QRU

Within the last few years the term 'Foot Speed' has become a term frequently used by Australian Rugby Coaches at various levels.

It has become a unit in the Individual Skills Module of the current ARU Level 2 coaching course. Within this unit there are many references to Stride Length and Stride Rate, terms which have been adapted from track and field coaching.

As a result many coaches associate the concept of *Foot Speed* with running speed and running style, hence the further association is that Foot Speed is a skill that only the faster more evasive players need to consider and therefore train for.

This may sound like a harsh judgement on the knowledge of some of our coaches and I will concede that there are some coaches that do identify Foot Speed with other aspects of the game such as 'close quarters evasion' in traffic and 'creating drive' at the breakdown.

One statement I will be prepared to make is that very few coaches would implement a regular training program for Foot Speed into the current training regime.

My aim is to elucidate the importance of Foot Speed and explain the reason it is a *necessity for all players* to improve it. I will explain the area's of the game where Foot Speed is important and outline the best training methods to improve Foot Speed, that can be incorporated into current training programs without having to create extra sessions specific to Foot Speed training.

My perception of current trends is that;

- Only the Fast or Evasive players need to practice Foot Speed
- Foot Speed training is rarely incorporated into Team training sessions

### ***Fast Feet NOT Foot Speed***

As stated earlier the term Foot Speed has consistently been associated with Stride Length and Stride Rate. I do not believe these terms are specific to Rugby.

In rugby the speed at which your Feet move and the position in which they are placed (relevant to your body) are paramount to success.

Rapid foot work and correct foot placement is a critical factor in sport at all levels.

Unlike track running which operates in one single plane, Rugby is a ***Multi-Directional Sport***.

Players are constantly moving at different speeds and in different directions. Rugby requires a combination of multi-directional movements to be performed at speed and often under pressure from the opposition

The benefits of Fast Feet are;

- 1) **Improved Quickness (acceleration)**
- 2) **Improved Agility**
- 3) **Improved Balance (Body Control)**

#### **1) Improved Quickness (acceleration)**

It takes 40m to 50m to reach top speed in running, in sport most vital distances for success are 5m to 30m, therefore the ability to accelerate quickly is more important in a team sport such as Rugby.

Quickness should not be confused with Speed. Quickness is the ability to move quickly across the ground.

In rugby a player's quickness over small distances will give the player the ability to find space, create space (attack) or deny space (defence).

Quickness is a SKILL, not a birth trait. Anything that is a SKILL can be taught and improved. Quickness will have a direct relationship to Reaction Speed. If a player develops Quickness as a skill his ability to react will be improved and therefore his reaction time to opposition player movements will be reduced.

#### **2) Improved Agility**

The ability to get your body near the ball, space or opposition will determine success or failure in most cases in rugby.

Agility and reaction speed is where space is created or lost.

The quicker a player can position themselves the more available options there are for the player and therefore the team.

Agility can be improved through practising various multi-directional movement patterns. If the player is able to move their feet fast the movement will be achieved in less time. Agility drills should be a progressive step once fast feet patterns have been established. Agility is the result of moving the body more efficiently through the fast feet movements.

### **3) Improved Balance (Body Control)**

Without Foot control there is no Body control. The more skilled a player is with foot movements the more balanced and stable the player will be.

Balance starts with feet positioning. If a player does not create a stable base he will be unbalanced. The width in the transverse plane, the depth in the frontal plane and the stagger of the feet will influence a players stability.

Once a player is in contact with another player he will be contesting against forces and trying to exert his own force. to generate force a player needs a strong stable base. Therefore the player needs to possess the ability to create a stable base through positioning his feet quickly. The player who can establish the strong stable base quickest will be the more successful.

If a player is poor at adjusting his feet he will be continually caught off balance and relinquish the position of power.

Fast Feet will gain an advantage in controlling where your body is in relation to the ball and or opposition. A player who gets to the ball first, the space first and is difficult to beat in defence will always have an advantage.

## ***Applications to Rugby***

Quickness (acceleration), Agility and Balance (Body Control) all have many applications in the game of Rugby. If a player is proficient in these areas he will be a superior player to those who aren't.

### **General Play – Attack (all players)**

The ultimate aim of every player should be to run into space while in possession of the ball in order to get to or closer to the tryline. A player should always be aiming to run into spaces rather than bodies. *A player's ability to put himself into space will be reliant on his feet's ability to get him there. The feet control the body.*

In close quarters (close proximity to the breakdown) it is better for a player to contact one side of a defender rather than the centre of the defender. If an attacker does this he stands a better chance of falling forwards, towards the gain line. If a player simply heads in for a front on confrontation he risks the chance of going backwards. Players should always run at spaces not matter how small they are. The options for the attacker are much greater if falling into space when tackled.

Along with moving oneself into space through quick feet movements, a player can also create space for team mates through quick feet movements. It is well known that for every action of an attacker there will be a reaction from a defender. If an attacker challenges and engages a defender successfully he will be able to create space for other attackers. A player who is moving quickly will be more successful at challenging and engaging a defender.

### **Defence (all players)**

If a player is successful in finding space through Quickness of feet movement in attack the player should also be effective in denying space in defence. A defender will have a better chance of successfully tracking an attacker if he can quickly cover ground and force the attacker into the position he wants.

### **Lineout (No.'s 1-8 et al)**

Modern lineout's incorporate a great deal of movement on the ground prior to the ball being thrown in. The jumping and lifting unit are searching to either create a mismatch or to jump into the air uncontested. The ability of the players to move quickly into position and jump is the main determinate to success. Additionally the supporters (lifters) need to have their feet in a strong position in order to generate the correct amount of force to support (lift) the jumper.

### **Clearing Pass (No. 9 et al)**

The first Key Factor in a Clearing pass is Feet Position. In order to generate force to throw a pass of considerable distance the player needs to operate from a strong base, this will mean the feet need to be in a particular position. The quicker that position is established the sooner and further the pass can be thrown.

### **Catching a Kick (14, 11, 15 et al)**

A player's needs to be in position early to catch a kick coming from a considerable height. If the ball swings away late due to environmental factors the player's needs to be able to adjust quickly to ensure the success of the catch.

### **Making a Tackle (all players)**

Having one foot close to the attacker is a Key Factor to a successful tackle. The ability to place the foot close to the attacker, who will obviously be moving, will be a major factor in how successful the tackle is.

### **Support (all players)**

When one player is in possession of the ball what are the other 14 players doing? The answer is *Supporting*. The ability of a player to put himself in a position to be used will mean the difference between continuity of play and stoppages in play or dispossession of the team. A player with superior agility and quickness can place himself in more useful positions than a player who is cumbersome and slow.

### **Scrum (No.'s 1-8)**

Balance, Stability and Body Control are central to success in a Rugby Union Scrum. The aim of every player in the pack is to be strong and stable. Upon engagement players are told to "chase the weight" this is only possible with fast feet movements. If a player takes one large step he is unbalanced for a longer period of time due to him only having one foot on the ground. Therefore players need to be practiced at fast feet movements in order to maintain stability.

### **Rucks (all players)**

Poor Body Control and Feet Placement will be detrimental in a Ruck situation. If a player becomes unbalanced and falls to ground he will be penalised. In order to create effective drive force it is better for a player to make many contacts with the ground rather than trying to take large steps. Many ground contacts requires fast feet.

### **Mauls (all players)**

A maul much like a scrum requires Balance, Stability and Body Control. Players need to avoid becoming unbalanced through tripping over their own or others feet. In a maul the force being applied from the opposition will be constantly changing, therefore players need to be able to adjust where they are directing their force, the quicker the adjustment and generation of force the more successful the maul will be.

This is by no means a definitive list but it certainly highlights the large number of elements of Rugby where Foot Speed is a major contributing factor.

The ability of a player to move his feet quickly will allow him to perform a larger range of skills with greater proficiency than someone lacking Fast Feet.

## **Recommended Training Methods**

Fast Foot work can be difficult to master in a short space of time, it needs to be practiced regularly in order for the practice to become automatic behaviour.

The activities used to practice Fast Feet are basic types of plyometrics. The activities train the same physiological aspects of plyometrics.

Plyometric programs tend to move towards working with larger loads in explosive movements where as fast feet tends to focus on using low loads in a repetitive manner to ensure speed of movement is reinforced

The stretch-shorten cycle is the physiological aspect that is trained to improve feet movement. The Stretch-shorten cycle uses the elastic energy stored in the muscle. The stretch-shorten cycle can produce a much more powerful contraction than a simple concentric contraction. The stretch reflex also occurs much quicker than the conscious initiated concentric contraction.

### **Quickstep Ladder**

The best form of training for Fast Feet is through the use of a Quickstep ladder. The Quickstep ladder forces the players legs and feet to adapt to extremely fast patterns of footwork by repeating them over and over, Repetition is required to ingrain movement patterns and progressively master foot control at higher and higher speeds.

The layout of the ladder teaches a continual loading, firing and re-loading of the foot. It also enhances limb alignment, which is crucial for the joints ability to apply extension forces and to prevent possible overuse injuries.

### **Mini Hurdles**

Mini Hurdles reinforce the recovery phase of leg movement. That is recovering the leg quickly after a ground contact.

Hurdles employ the “overloading” principle of training. If a player can recover his leg over a 15cm or 30cm Hurdle then he will be much more proficient a recovering his leg across flat ground.

#### ***Lack of resources?***

*Many of the movements prescribed with the Quickstep ladder and Mini Hurdles can be performed without them. The movement patterns with the ladder can be replicated simply by jumping across a line on the ground. Or field marker cones can replicate the height of hurdles. Resources are not the limiting factor – a coach’s imagination is!*

### **Types of Movements**

As stated previously Rugby is a Multi-Directional Sport, therefore it is important to remember to train in that manner. The movements practiced with both the Quickstep Ladder and Mini Hurdles should be not only forwards and backwards but laterally as well. Muscles need to be trained at moving in directions other than forwards and backwards. The Flexibility and strength of the muscles around the Hip joint are an important factor in being successful in Multi-Directional movements.

## Coaching Tips

When doing Fast Feet activities there are several Key points to remember.

### Quickstep Ladder

Start all activities slowly, at a walking pace or just above until the movement pattern is learned. Progress to a maximal speed once the player has mastered the movement.

Key teaching points are;

- Light feet are quick feet
- Work on the ball of the foot
- Quick ground contact time
- Watch for scuffing and movement of the ladder, as this indicates poor recovery of the leg and too much ground contact time.

### Appropriate Activities for Rugby;

#### 1. Walk / Run

1 foot per square \*Forwards movement

#### 2. Two foot Run

2 feet per square \*Forwards movement

#### 3. Lateral Run

2 feet per square \*Lateral movement

#### 4. Two In Two Out Side On

4 feet per square \*Lateral movement

#### 5. Two In Two Out Front On

4 feet per square \*Forwards and Lateral movement

#### 6. Side Reach Run

4 feet per square \*Lateral Movement

#### 7. Side Step Run

4 feet per square \*Forwards and Lateral movement

#### 8. In Out-Out with Hip Rotation \* excellent for hip Flexibility

3 feet per square \*Forwards and Lateral movement

9. **SPRINTOUTS:** When the player has worked through the ladder, marker cones can be placed out in front of the ladder so that the player has to then sprint out of the ladder. These Markers can be placed at varying angles and incorporate changes of direction.

**NB** These movements patterns can be practiced without a ladder on flat ground with a line on the ground eg field markings. The coach would need to be aware that the players may not get the same kinaesthetic feedback they would from a ladder if they tread on the line. The exercise will need to be much more self-monitoring.

## Mini Hurdles

Start all activities slowly, at a walking pace or just above until the movement pattern is learned. Progress to a maximal speed once the player has mastered the movement.

### Key Teaching Points

- Toe Up
- Heel Up
- Knee up – lifting from the Hip, develops Hip strength.

### Appropriate Activities for Rugby;

#### 1. One Foot Walk

1 foot per Hurdle \*Forwards movement

#### 2. Dead Leg Run

1 foot per Hurdle \*Forwards movement

#### 3. Two Foot Walk

2 feet per Hurdle \*Forwards movement

#### 4. Two Foot Run

2 feet per Hurdle \*Forwards movement

#### 5. Double Foot Walk

2 feet per Hurdle \*Forwards movement

#### 6. Double Foot Run

2 feet per Hurdle \*Forwards movement

#### 7. Lateral Walk

2 feet per Hurdle \*Lateral movement

#### 8. Lateral Run

2 feet per Hurdle \*Lateral movement

#### 9. Lateral Run with Change

2 feet per Hurdle \*Forwards movement

10. **SPRINTOUTS:** When the players has worked through the hurdles, marker cones can be placed out in front of the ladder so that the player has to then sprint out of the ladder. These Markers can be placed at varying angles and incorporate changes of direction.

## **Agility Drills**

The formation of Agility Drills really are only limited by a coaches imagination. Some simple frameworks to work within are;

Diamond Shape with a cone in the middle.

Use different coloured cones and order a sequence in which the players have to touch the cones. Alternatively number the cones differently and give them a sequence to follow.

Use different shapes and configurations.

The types of movements that should be catered for are obviously those that are needed in the game;

1. Stright Line explosive accelleration
2. Braking / Stopping
3. Backwards running
4. Forwards / Backwards combinations
5. 90 degrees steps of left and right sides
6. 180 degrees steps of left and right sides
7. Lateral movement and direction changes
8. Forwards / Lateral / Backwards combinations
9. Direction changes off only Left or only Right foot

**All the drills mentioned using the Quickstep Ladder, Mini Hurdles and the principles of Agility Grids are referenced to Glenn Jenkins and are contained in his Video “Quickness and Agility for Sport”.**

## **Programming**

Firstly it is important that the players practice any new drill at a slow pace and only increase once they have mastered the movement pattern.

To begin with the players should be introduced to all types of training (Ladder, Hurdles, Agility drills) when they are NOT fatigued. This will ensure they can learn the movement patterns in an ideal situation and their body can start to learn the movement patterns.

When introducing Fast Feet training do it at the beginning of the sessions.

Once the players are learned at the movements challenge them with different stages of fatigue. Keep in mind for best results *the players must practice moving fast in order to move fast*. If they only ever practice fatigued they will never move as fast as they potentially could.

The best way to practice this regularly is to incorporate into your Warm Up routine. The dynamic Warm Up is very widely used now and these Fast feet exercises are a form of dynamic Warm Up. The ladder drill in particular are not dangerous to a player who has not stretched because the movements are very small.

### **Number of sessions:**

There should be some sort of Fast Feet activity in every one of your sessions. Every player in the team needs fast feet at many different stages in a game.

### **Length of sessions:**

There is no need to have any more than a total of 5 or 6 Ladder/Hurdle Drills accompanied with an Agility Grid.

### **Work to Rest Ratio:**

Beginner 1:5

Advanced 1:2

Developing Faster feet is a skill and must be targeted specifically as it is the feet that control the body. All the strength in the world is wasted if the feet and body are out of control.

There are many times when people observing Rugby see a particular player and make the comment "he moves well". There is no reason why all players shouldn't be able to do the same.

Faster Feet movement is a Skill that can be learnt and is important *for all players* to learn.

*If your Feet move Fast you will have better Acceleration, Agility, Balance and Body Control.*