Where is all the Tall Timber?

Level 3 Major Assignment By Bill Swain

Introduction
The famous rugby league coach Jack Gibson once said “A good big player will always beat a good little player”. In the world of elite rugby union, this synopsis is no more evident than when players are contesting for possession in the air, where mere centimetres can be the difference between winning or losing the ball or even a game.

From my relative novice experience in the field of rugby union talent identification over the past two years and a real concern from many experts, there seems to be a general feeling of a lack of depth of tall, skillful and physically suited players progressing through the respective talent ID and development programs at all levels.

The positions in a rugby team this most relates to is the lock, blind side flanker and to a lesser extent No. 8 roles. These position’s, in particular at the elite level benefit with height and athleticism in order to contest possession in the air and are considered crucial in the very first team task of winning the ball. The area’s of the game where the contest for the ball in the air is most evident is the lineout and restarts from halfway and the 22m line.

Averages taken from the top 6 Super 12 teams in 2003 indicate 21% of total possession is won at lineouts and 9% from restarts which totals 30% of a teams ball winning opportunities. At test level since 2001 35% of Australia’s tries have been scored from lineout possession. These statistics demonstrate the importance of tall players in the ball winning aspects of rugby.

Other high profile Australian sports that require tall, skillful and athletic players are Basketball and Australian Rules Football. Rowing, athletics and swimming also have a high percentage of tall athletes.

This paper will attempt to offer some insight of the issues facing Australian rugby in attracting tall players. It will firstly look at how rugby union currently compares to other professional codes where tall athletic individuals are a necessity.

It will address current techniques and strategies employed to attract, identify and develop our young talented players of tomorrow and whether these strategies safeguard against any gene pool deficiencies in our playing ranks.

And finally it will look at possible solutions to address the apparent drain of tall athletic individuals currently being attracted to our game.
HOW WE COMPARE TO THE OTHER CODES

There is strong evidence to show the physique of male rugby union players has evolved dramatically during the 20th century. Data from 1905 shows that much of this evolution has corresponded with secular changes within the general population. Although it is difficult to generalize across different demographics, secular increases of about 1cm per decade in height and 1kg per decade in body mass have been fairly typical of developed countries during this period.

Since the advent of professionalism in Australia in 1996 rates of increase of body mass have been well above rates of increase in the source population, while increases in height have been comparable to the secular increases in the source population. This would suggest that in the professional era our players at the elite level are becoming more muscular which equates to faster, stronger and more powerful players, but not necessarily much taller than in previous decades.

The average heights and masses of the 20 Rugby World Cup finalist squads in 1999 and 2003 were calculated from self-reported values. There were significant correlations between final ranking and average body mass and height. Teams with taller and heavier players performed better. This would lead to the conclusion that if Australian rugby wants to compete in future international competition, it has to produce teams that are superior to our competitor nations in both height and body mass.

The trends in physique in rugby union mirror changes in other sports ie. Rugby League. However in several Australian sports where specialist tall players are a priority (Basketball – centres, Australian Rules – ruckmen, Athletics – high jumpers) the rates of increase in height appear to have outstripped secular trends in the population from which athletes are drawn to a similar extent that rugby union players have increased body mass. This would suggest that we are maybe being left behind by our competitors in the quest for taller players.

Graph 1a shows a comparison between tall athletes in several levels and age brackets of elite rugby union and that of the elite AIS development squads of AFL, basketball, heavy rowing and swimming.
Graph 1a

<table>
<thead>
<tr>
<th>Sport</th>
<th>Age</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>RU: Talent Squad</td>
<td>16.8</td>
<td>191.3</td>
<td>5.5</td>
<td>183.1</td>
<td>199.4</td>
</tr>
<tr>
<td>RU: Academy</td>
<td>19.8</td>
<td>192.8</td>
<td>7.3</td>
<td>176.0</td>
<td>198.5</td>
</tr>
<tr>
<td>RU: Super 12</td>
<td>25.6</td>
<td>199.1</td>
<td>3.2</td>
<td>193.0</td>
<td>204.0</td>
</tr>
<tr>
<td>AFL Draft Camp (Ruck)</td>
<td>18</td>
<td>197.3</td>
<td>2.7</td>
<td>191.9</td>
<td>205.2</td>
</tr>
<tr>
<td>AIS Basketball</td>
<td>17.8</td>
<td>202.0</td>
<td>11.8</td>
<td>184.1</td>
<td>221.6</td>
</tr>
<tr>
<td>AIS Heavy Rowing</td>
<td>23.4</td>
<td>190.2</td>
<td>2.8</td>
<td>185.5</td>
<td>193.1</td>
</tr>
<tr>
<td>AIS Swimming</td>
<td>22.3</td>
<td>172.9</td>
<td>46.5</td>
<td>0.0</td>
<td>196.0</td>
</tr>
</tbody>
</table>

All figures in graph 1a are the latest on file following national testing for each of the sports at the Australian Institute of Sport. The first column shows the figures for the National Talent Squad program with heights recorded for locks. This is a nationally coordinated program through each of the states and represents the best of school-age players in Australia. With an average height of 191.3cm and an average age of 16.8 years, height figures in this category are reasonably sound considering many of these individuals have several more years of growing before they reach maximum height.
It is in the next two categories where the greatest concern for height lies particularly in the rugby Academy programs. With an average age in this category of 19.8 years, these athletes are approaching the end of their growth phases. An average height of 192.8cm shows an increase from the younger Talent Squad members of just 1.5 cm. This increase is in line with secular trends of the general population.

The respective major union Academy programs are considered very important in identifying and developing players to progress to fully professional Super 12 rugby players between 0 – 3 years. It is an important program in providing depth of talent and quality players to push for positions in the Super 12 squads. For locks at the professional level, a minimum of no less than 195cm is considered the bench mark with heights of 198cm – 200cm + favorable when selecting professional locks. The current average Academy height for locks is well below what is expected at Super 12 level which would suggest the numbers of locks that progress from the Academy level to the professional ranks is minimal. It would also be presumed that for more Academy level locks to progress the average height of individuals in these programs needs to increase quite considerably.

The same level of Academy athlete in AFL and Basketball are notably taller. At an average age of just 18, this years AFL Draft Camp ruckmen had an average height of 197.3cm. At an average age of just 17.8, the AIS Basketball squad of centres tower with an average height of 202.0cm.

It is important to point out when comparing these figures, basketball centres may be considerably taller, however their body type is heavily ectomorphic. This means they are taller slender athletes that are suitable for jumping, but not overly muscular and suitable for high impact body contact. Rugby union locks and AFL ruckmen however are more mesomorphic with greater muscle composition making them more suitable to the contact aspects of both codes. Mesomorphic body types are generally shorter on average than ectomorphic body types.

At the professional Super 12 level locks have an average age of 25.6 years at a height of 199.1cm. Many of these athletes have been selected heavily based upon their physical characteristics and suitability to compete at this level. This average height level is only marginally greater than that of the AFL Draft Camp ruckmen (197.3cm) with the tallest Super 12 lock standing at 204cm compared to the tallest AFL Draft Camp ruckman standing at 205.2cm.
It would be fair to assume that a high percentage of ruckmen that are drafted to
AFL clubs will continue to grow in height. It would also be fair to assume that
AFL clubs are going to select those ruckmen from the AFL Draft Camp that are
taller players and more effective when competing for the ball in the air. From
these assumptions it would be fair to ultimately presume that professional AFL
ruckmen are on average taller than professional Super 12 locks.

There is no doubt that professional basketball centres in Australia are the tallest
category of all.

HOW WE CURRENTLY SELECT AND DEVELOP OUR ELITE PLAYERS

The processes in Australian rugby to firstly identify and secondly develop our
talented young players have evolved and undergone many changes particularly
since the advent of professionalism in the game in 1996. Many purists would say
that in the modern era, since talent identification has been based heavily on
thorough physical testing, skill development programs and scientific data, the
mystery of elite ability and the romance of the brilliant player has been lost.

For many years, Australian rugby relied heavily on the creaming process to select
it’s best players. The theory that the best players will rise to the top through
firstly school and junior representative teams, then young adult age
representative teams ie. U/19’s and U/21’s and then finally through State teams
and eventually Wallabies served Australian Rugby with varying degrees of
success for many years.

There is no question that professionalism and competition for talented young
players between unions mean that processes cannot be left to chance. All
methods used in the identification of talent in rugby have as their aim the
prediction of future achievements based on the players present abilities and the
environment within which these abilities manifest themselves. Heilbrun (1966) –
“Talent identification actually evaluates that which exists in actuality, not in
possibility”.

Shortly after rugby turned professional, the state unions implemented Talent ID
programs in order to identify and develop local talent to the standard required at
the top level. Most of these early programs relied heavily upon volunteer input
from the rugby community. While some players progressed through to the elite
level, the lack of knowledge of players athletic ability combined with the reliance
on amateur/part time coaches to develop players skills meant the success rate in
players advancing was not of an effective or satisfactory level.
Today the ARU oversee and run in cooperation with the state unions the various levels of talent identification from schoolboy through Academy to Super 12. Current programs involve regular physical testing, consistent and high level skills and physical development coaching administered by fulltime professionals as well as career and educational support. The net is cast as far and wide as possible in order to not only select the best players but also the best athletes.

Whilst the guess work has largely been taken out of the current talent ID programs, players in the national programs are still in the development phases and are only now getting to the stage where turning professional is becoming a reality. There is still also a strong reliance upon the creaming process particularly within the school-age category in order to select the best players for these programs.

AFL have employed similar talent ID and development programs in the past decade with increasing numbers of players progressing from this level to the professional ranks.

In 2000 Australian Basketball introduced talent ID and development programs through the AIS in order to produce better quality players for NBL teams and ultimately the Boomers. Fearing that this program would attract tall, athletic players from it’s ranks, the AFL reacted with a conscious effort to encourage and keep these players in the game. This response appears to have succeeded with average height of ruckmen at proceeding draft camps exceeding previous years.

It is interesting to note how our current tall athletes progressed through the playing ranks to the professional level. As part of this paper all the tall players from one of the Australian Super 12 provinces were asked a series of questions of which the answers are listed below. I have not named them but have given them random numbers from 1 – 5.

<table>
<thead>
<tr>
<th>Height:</th>
<th>Weight:</th>
<th>Age:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Player 1 – 198cm</td>
<td>115kg</td>
<td>23</td>
</tr>
<tr>
<td>Player 2 – 198cm</td>
<td>110kg</td>
<td>30</td>
</tr>
<tr>
<td>Player 3 – 195.5cm</td>
<td>109kg</td>
<td>21</td>
</tr>
<tr>
<td>Player 4 - 196cm</td>
<td>110kg</td>
<td>27</td>
</tr>
<tr>
<td>Player 5 – 198cm</td>
<td>113.5kg</td>
<td>31</td>
</tr>
</tbody>
</table>
Q1) Describe Your Playing History from U/16’s?
Player 2 - School U/16’s, School 1st XV at 17. After school 1st Grade colts for 2 years. Aust. U/21’s. Brumbies 1st XV. Wallabies
Player 5 - Played both League and Union at school. Schools U/16’s, Schools 1st XV and CAS 2nds at 17. 1st Grade Colts for 2 years. NSW U/19’s. Sydney 1st Grade. Aust. U/21’s for 2 years. Brumbies. Wallabies

Q2) Other Sports Played?
Player 1 – Swimming, Cricket, Athletics, X-Country, Volleyball, Basketball
Player 2 - Cricket, Athletics – High Jumper
Player 3 - Cricket, Soccer, Swimming, Touch Footy
Player 4 - Soccer
Player 5 - Rugby League, Basketball, Surf-Club, Swimming, Nippers

Q3) Did You Ever Seriously Consider Another Sport & When did you start growing very tall?
Player 1 - Parents always supportive of rugby. Didn’t start growing until 17-18
Player 2 - I liked my cricket and took it seriously. Always above average height
Player 3 - Always liked Rugby. In year 11 I started growing really big.
Player 4 - No. I only ever wanted to play rugby. I was always big and tall.
Player 5 - No only really rugby. Always above average height & weight. Kept growing into early 20’s.

4 out of 5 of these athletes progressed to the top level via the creaming process by playing in representative teams with very little involvement in organised talent development programs. Only one of these players was a member of an academy squad.

Most of them also played and enjoyed other sports and quite a lot of them were relatively late developers still growing into their late teens and early twenties.

With 4 out of 5 of these players either current or former Wallabies it is obvious that in the past rugby union has relied heavily on the creaming process of it’s own ranks only, to select it’s tall athletes.
POSSIBLE SOLUTIONS THAT MAY ATTRACT MORE TALL ATHLETES TO RUGBY.

If rugby continues to rely on the creaming process only to select it’s tall players and with other sports competing for the same type of athlete we are running the risk of falling behind these sports and also our competitor nations. Rugby needs to take the example of the AFL when Basketball posed threats to their tall player ranks by being pro-active and determined in their quest for tall individuals.

Rugby has been very active in recruiting players from Rugby League particularly for big, fast and powerful outside backs and playmakers. Why couldn’t the talent ID & development programs be as equally interested in looking at other codes like Basketball and Australian Rules to select tall players. There would in particular be good opportunity for this to occur at the school-age level within the respective state union and national talent ID programs. By at least being knowledgable and tracking players through their respective Talent ID systems, then if tall individuals make the decision to leave that particular sport, rugby union may become an option to them. At this age and stage of their personal development they will also have time to learn the game through Academy and development programs. A typical opportunity for rugby would be in the following scenario:-

"John Smith is a 16 year old 196cm basketball centre playing with a Western Sydney club. He plays rugby for his school during the week and loves it but also loves his basketball which he plays on weekends. There is no junior rugby club in his area for him to play with on weekends. He is a member of the Western Sydney Academy of Sport Basketball program. He is very physical and aggressive on the Basketball court but not the most skillful player. He is quite muscular in build compared to other players around him. John makes the NSW U/16’s team as a centre and attends the National U/16 Basketball Championships at Parramatta. He plays well at the nationals but is constantly fouled out of games through his aggressive style of play. As a result he is not considered disciplined enough to be accepted into the Australian Institute of Sport National Basketball Development program. This has been a long term dream and goal for him and when he returns home he is very disillusioned and frustrated with basketball and decides to quit the game and just concentrate on school"
By just being knowledgable about John Smith in the above scenario, rugby may have the opportunity to attract this very tall and suitably skilled (physical and aggressive) player to our game. This is not about actively poaching or stealing players from these other codes but encouraging and educating them of the opportunities that exist in rugby union. It is about being open to selecting physically suitable players from all sports and backgrounds and not just being confined to selecting from the rugby playing ranks.

Most current Talent ID programs have spotting networks. These spotting networks could easily be extended to include people who have good youth knowledge in other sports where tall athletes are required.

Another opportunity that rugby currently has, is to make selection of tall athletes into talent ID and development programs mandatory if they fit the physical standards required but aren't necessarily the best players. As proven in the questions asked to current professionals, many of whom were late developers, there is plenty of time at a younger age to start working on these players core skills, but only a few of them continue developing physically into the type of athlete required. With more of these types of players in all development programs then this should transfer to more of them progressing to the next level.

Once in these programs these tall athletes need to be given plenty of time and scope to fully develop and grow.

The final suggestion revolves around how the game is marketed and sold to the general public. Much of this promotion in the modern era has been targeted at challenging and competing with our major local competitor, Rugby League. As a result much of the promotional footage of rugby revolves around the area’s of the game that are similar to rugby league, namely try-scorers, ball players and goal kickers with minimal coverage given to the tall athlete specific parts of the game ie. Lineouts & restarts. These area’s are not considered as important or spectacular as scoring tries.

It would certainly assist in attracting more tall players to rugby, if young players can see top level tall athletes being promoted and revered on equal terms as the high profile try scoring backs.
SUMMARY

This paper has hopefully alerted it’s readers to the fact that rugby is currently not on equal terms with it’s local competitors in the bid to attract and develop suitably tall athletes.

While the physicality of rugby players at the elite level has evolved, this change is based around body size and musculature of it’s athletes and not necessarily height.

This area is of a major concern particularly considering the inclusion of a fourth Super 14 Australian team in 2006 means our Talent ID and development programs will be more important than ever in the bid to produce enough players with the necessary ability.

What is positive is the Australian Rugby Union and respective state unions do have the right structures and programs in place to harness and develop players to this required level with experienced & knowledgeable professional coaches heading these programs. The challenge now is to fill these programs with the right people, and going outside the square of current rugby pathway structures may be necessary in order to find suitably tall players.

This I believe can be achieved more through a knowledgeable and understanding approach of tall athletic individuals within other sports, rather than actively approaching and coercing players across to rugby.

It is one strategy that needs to be seriously considered in the bid to produce players at the top level who are physically suitable and who cover the many different body types required in rugby union.

It is too easy now to sit back and say, “there just aren’t enough good tall players around.” This may come back to hurt us in years to come if we don’t act and be pro-active in constantly challenging our current talent ID processes.
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