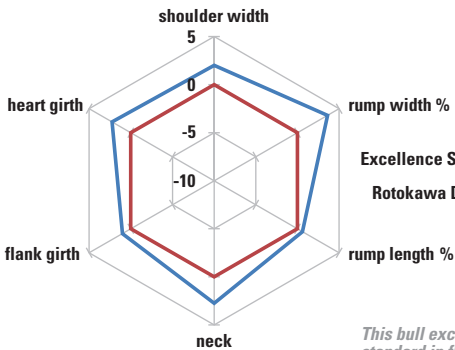


ROKAWA DEVON 93

DESCRIPTION

Bull 93 is the son of 688 and a full brother to Rotokawa 861. He is a frame 4 bull and has up to 7,000 progeny born in the US and Canada. He is an excellent choice if you are looking for a bull to add volume of meat to your calves. Bull 93 has a tremendous front end and adds volume of meat to calves that he sires.

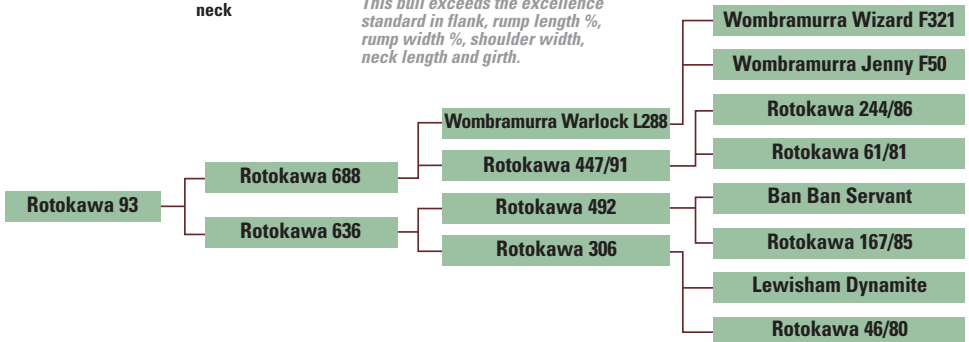
LINEAR MEASUREMENTS



This bull exceeds the excellence standard in flank, rump length %, rump width %, shoulder width, neck length and girth.

REGISTRATION & PEDIGREE:

Born: September 7, 2003 **Sex:** Male
Breeder Address: Rotokawa Estates Ltd.,
 No. 1 Line
 Rd 2, Wanganui,
 New Zealand



*Determined from the work of Jan Bonsma, Burl Winchester, Karney Redman and Gearld Fry.



ROKAWA DEVON 663/95

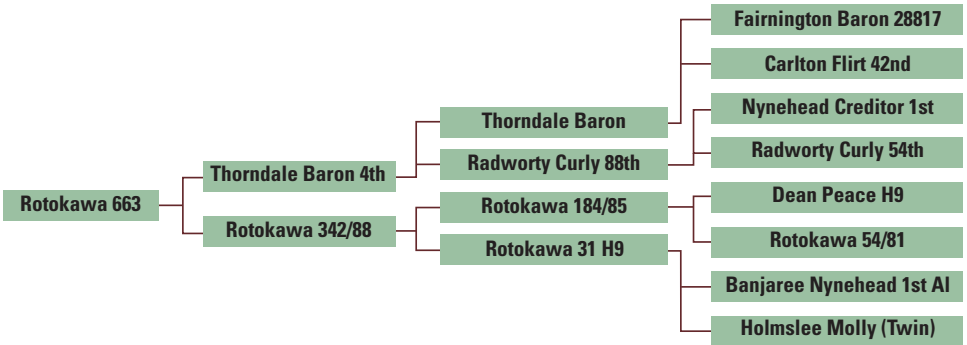
DESCRIPTION

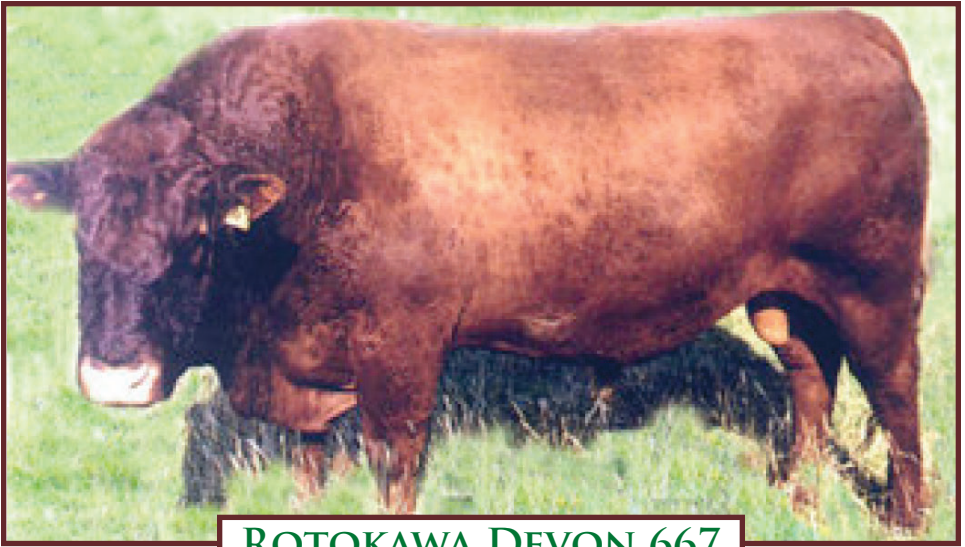
Rotokawa 663 is one of the senior sires from the Rotokawa herd. He died before we linear measured the herd—there is limited semen available from this bull as a result.

REGISTRATION & PEDIGREE:

Born: July 24, 1995 **Sex:** Male

Breeder Address: Rotokawa Estates Ltd., No. 1 Line
Rd 2, Wanganui, New Zealand





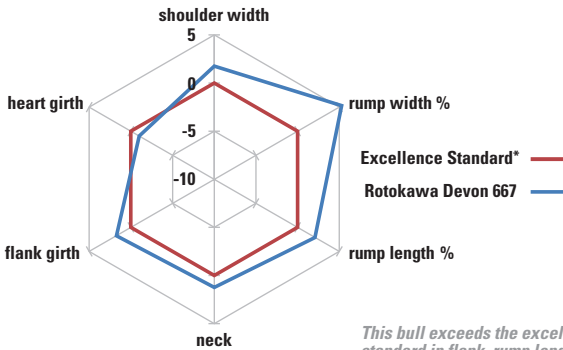
ROKAWA DEVON 667

DESCRIPTION

Bull 667 is the son of Rotokawa 425, the bull that had a huge impact in England when he was introduced there. He ranked number 2 in the Breed Plan rankings in 2006. Bull 667 has a tremendous rump width percent and will add volume to any calves he sires. Bull 667 has a very positive impact on any cows with a questionable udder—we have seen him straighten out an udder in one generation. This is bull power.

Bull 667 is no longer alive and supplies of semen are limited.

LINEAR MEASUREMENTS



This bull exceeds the excellence standard in flank, rump length %, rump width %, shoulder width, and neck length.

REGISTRATION & PEDIGREE:

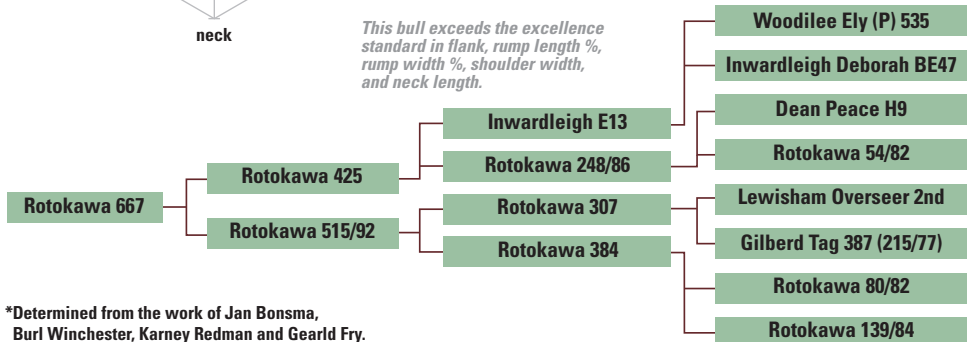
Born: August 18, 1995 **Sex:** Male

Breeder Address: Rotokawa Estates Ltd.,

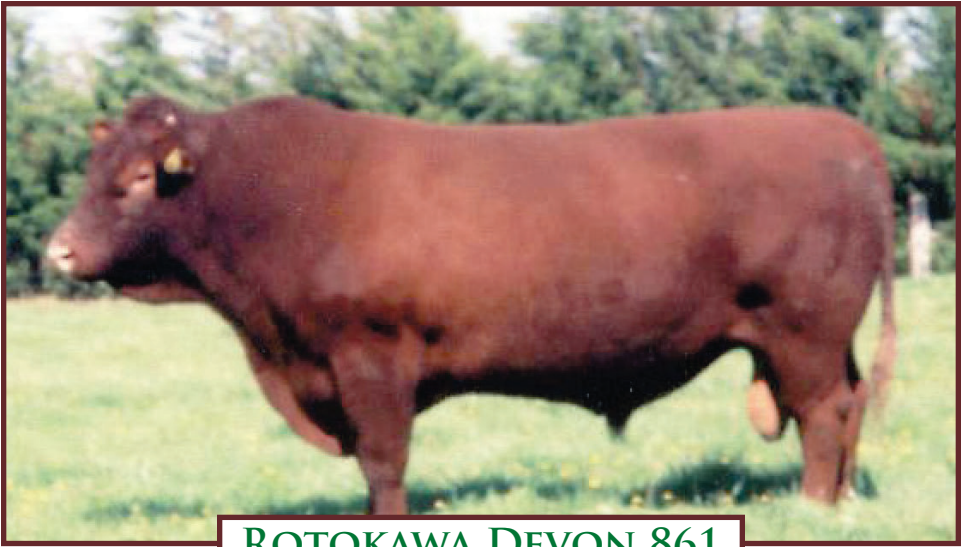
No. 1 Line

Rd 2, Wanganui,

New Zealand



*Determined from the work of Jan Bonsma, Burl Winchester, Karney Redman and Gearld Fry.



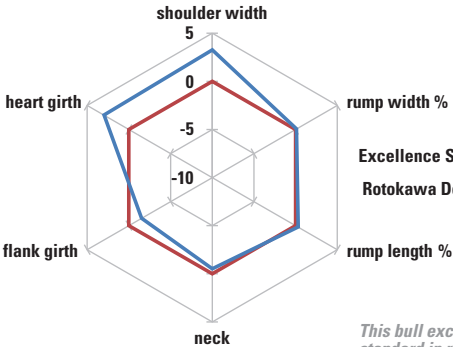
ROKAWA DEVON 861

DESCRIPTION

Bull 861 is a son of Rotokawa 688. He is a full brother of Rotokawa 93. He is taller than 93 and throws slightly taller calves. He is the Rotokawa bull with the highest intramuscular fat score as measured by ultrasound.

This frame 5 bull will add quality, fat and tenderness to any calves he produces. He has a strong front end and lots of meat.

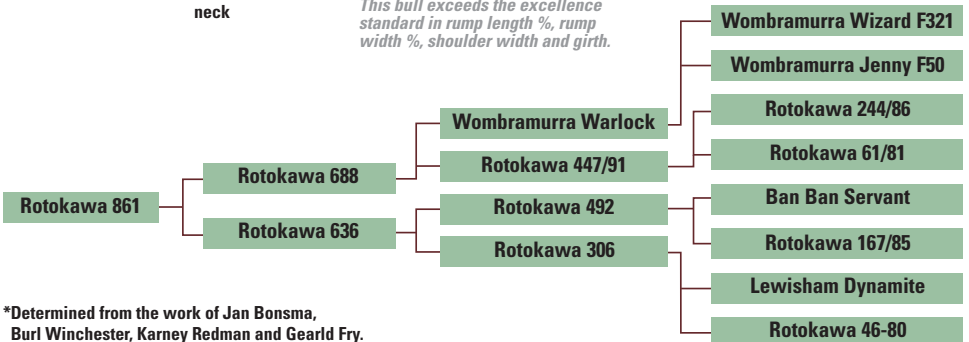
LINEAR MEASUREMENTS



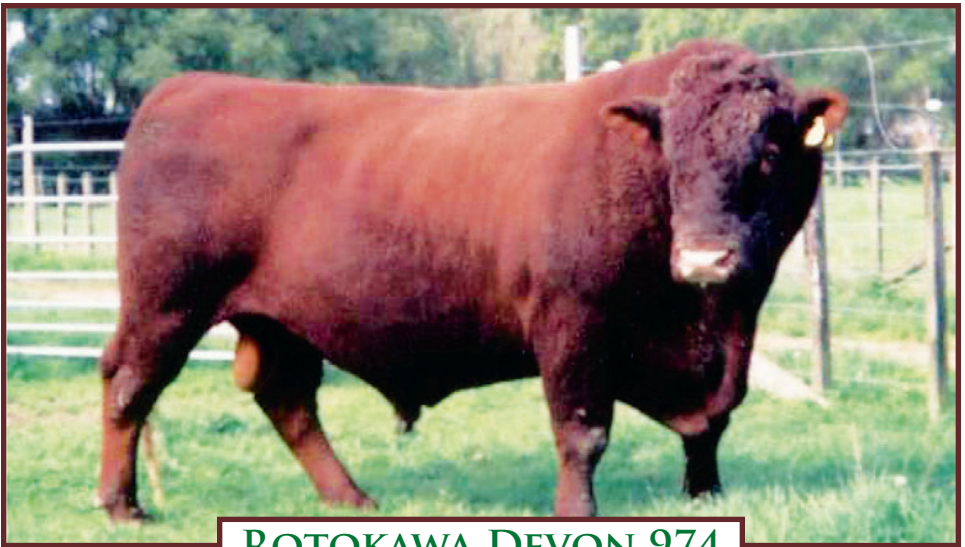
This bull exceeds the excellence standard in rump length %, rump width %, shoulder width and girth.

REGISTRATION & PEDIGREE:

Born: September 17, 1998 **Sex:** Male
Breeder Address: Rotokawa Estates Ltd.,
 No. 1 Line
 Rd 2, Wanganui,
 New Zealand



*Determined from the work of Jan Bonsma, Burl Winchester, Karney Redman and Gearld Fry.



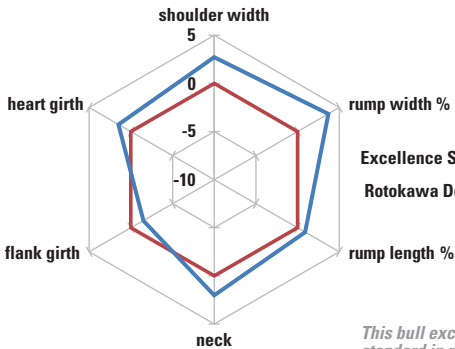
ROKAWA DEVON 974

DESCRIPTION

Bull 974 is the son of 667 who in turn was the son of the great Rotokawa 425. Bull 974 was the top bull in the Breed Plan measure of bulls in 2006.

This frame 3 bull will add volume of meat to your calves and will put a rump on them. Bull 974 is no longer alive and therefore if you have plans to use this bull you should purchase and put aside some semen for the future.

LINEAR MEASUREMENTS

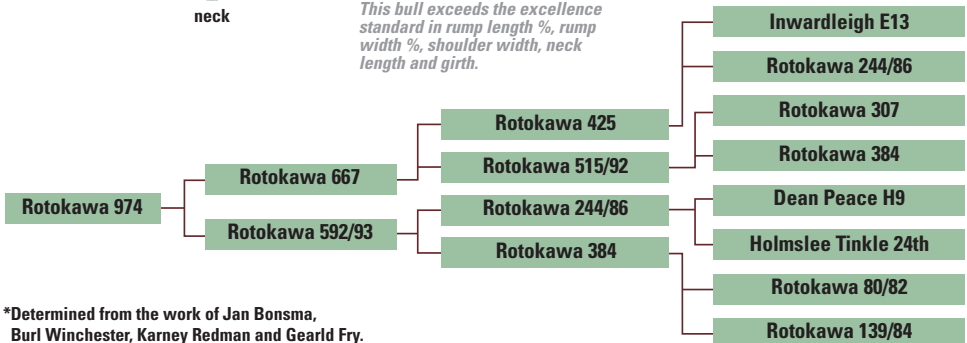


This bull exceeds the excellence standard in rump length %, rump width %, shoulder width, neck length and girth.

REGISTRATION & PEDIGREE:

Born: July 15, 2001 **Sex:** Male

Breeder Address: Rotokawa Estates Ltd.,
No. 1 Line
Rd 2, Wanganui,
New Zealand



*Determined from the work of Jan Bonsma, Burl Winchester, Karney Redman and Gearld Fry.

Linear Measurements

Rotokawa Cattle Company has developed an important new tool called a “spider graph” for evaluating and demonstrating the strengths and weaknesses of a bull or cow’s body conformation. The conformation is a critical indicator of how well the animal will function for the producer. I first saw a graph of this type in France, used to illustrate progeny performance in sheep, and applied the concept to evaluating cattle.

Breeding is the art of making pairs—combining complementary traits. Breeders can use our spider graphs to identify weak traits in individual animals and correspondingly strong points in potential mates, to create offspring with a perfected body conformation. Basically we take key measurements of the animal’s body, and compare certain measurements to other measurements on the same animal in order to determine key ratios. Then we represent those ratios in a visual layout that makes the animal’s breeding potential clear at a glance.

The basic linear measurement approach has been used for centuries to evaluate cattle, but in utilizing and refining it, I have drawn on work done over a period of years by Jan Bonsma, Burl Winchester, Karney Redman and Gearld Fry. Bonsma understood the significance of measurement and wrote about it in *Man Must Measure, Livestock Production, 1983*, but the task of distilling Bonsma’s ideas into a system fell to Winchester and Redman, who wrote a pamphlet titled *Why Measure?* in 1988. In recent years Gearld Fry has popularized this approach, and it was Gearld who introduced me to the importance of linear measurement. Since then I have verified the validity and significance of this system, not only through my field

experience throughout North America, in New Zealand, Argentina, Uruguay, England, and France, but also through my experience in marketing meat to stores and restaurants throughout the Northeast.

The measurements used for the ratios in the Rotokawa Spider Graphs are rump length, two-thirds body length, total top line, heart girth, flank girth, shoulder width, rump width and hip height. From these eight measurements we determine five key ratios that reveal balance and structural correctness for grass production.

Structural correctness indicates durability and longevity. Animals that are long-lived and will breed back consistently for many years are critical for financial success. Also, the ratios allow us to predict volumes of meat. Animals that exceed the excellence standard indicated on the graph will have a higher percent of meat in the high-value areas of the animal: the loin and rib areas.

What follows is a description of the graphs, how they are plotted, and how the breeder can use them. This method will indicate the general potential of a particular animal to thrive in an 100% grass-fed program, and identify areas of weakness or strength:

1) “Heart girth” indicates the **heart girth compared to top line**. The heart girth should be at least equal to the top line, and every inch of heart girth that is greater than the top line adds 37 pounds of red meat to the high-value areas of the animal. Adding heart girth to your meat animals is the easiest way to increase the value of the carcass and earn more money per animal in your herd. The “0” on the spider graph is set at equal; “0” indicates that the heart girth equals the top line.

2) **“Shoulder width”** is the comparison of the rump length (not the rump width) to the shoulder width. The rump length is the measurement from the hooks to the pins, and when compared to the shoulder width is indicative of masculinity and the presence of testosterone. The male is all about the shoulders. (The female is all about the rump.) The bull should have shoulders at least 2" wider than the rump length as a young bull, and a mature bull should have shoulders at least 4" wider than the rump length. The “0” on the spider graph is set at +2," the minimum for a good bull.

3) **“Rump width %”** is the comparison of the hip height of the bull to the rump width. A higher percentage is indicative of volume of meat in the rump area. We expect the bull to be 44% as wide as he is tall. Wider is better—the “0” on the spider graph is set at 44%.

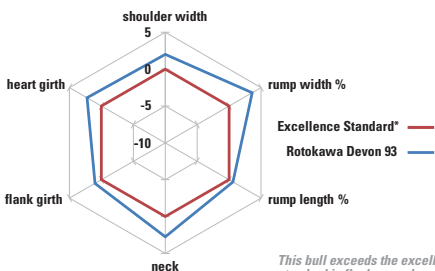
4) **“Flank girth”** is a comparison of the flank girth to the heart girth. On a bull, we would like to see these numbers be equal. A “0” on the spider graph indicates that the flank girth equals the heart girth. Equal is the ideal, but bulls will be greater or less in this measurement.

5) **“Rump length %”** is the comparison of the rump length to the two-thirds body length of the bull. This two-thirds length is measured from the rear of the animals to the point on the back bone directly above the point of the shoulder. The “0” in the spider graph is set at 37%.

Remember all animals have strong points and weak points. Each spider graph shows an excellent standard compared to ratios of a particular animal that may fall short of the standard or may exceed it. These graphs will help producers make more informed choices on breeding. All of our the Rotokawa® bulls are “prepotent;” that is, they have the “bull power” to impact their offspring in a consistent way—but they do have different strengths. You can see from the spider graphs which ones are stronger in the heart girth, rump width percent, and in the shoulder measurements.

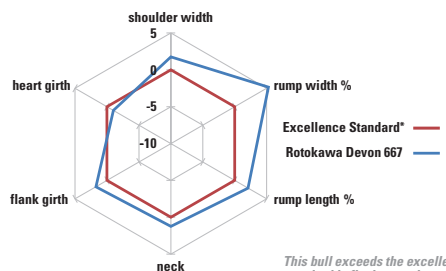
In summary our Rotokawa spider graphs provide specific criteria for breeding decisions that can be documented and communicated to others.

ROKAWA DEVON 93



This bull exceeds the excellence standard in flank, rump length %, rump width %, shoulder width, neck length and girth.

ROKAWA DEVON 667



This bull exceeds the excellence standard in flank, rump length %, rump width %, shoulder width, and neck length.

*Determined from the work of Jan Bonsma, Burl Winchester, Karney Redman and Geardl Fry.