

Native Forest Stand Management Guide – No 4

Forest Products and Marketing

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FOREST PRODUCTS AND MARKETING

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1.0 How to use this guide

The intent of this guide is to provide information on the range of timber products that may be available from your native forests and the options you have to sell them. The prices presented below are purely an indication of stumpage prices that **may** be achieved as at the date of this publication (2005). As a general rule stumpage (price) is drastically reduced with greater haulage distances, poor property access, long snig distances, quality of logs, etc.

2. Timber Marketing

2.1 What are stumpage, farm gate/ramp price and mill gate price?

Stumpage is a term that means the price of a forest product at the stump (standing) before cut, snig or haulage costs have been taken into account. In other words, it is the dollar value of a product that the landowner will receive from the purchaser, where the purchaser undertakes the harvest and has taken into account the extraction costs.

Farm gate price or log dump price is the value of a forest product after it has been cut and snig to a loading area. In this scenario the landowner or a sub-contractor has undertaken the cutting and snigging operation and will receive a price that reflects the stumpage rate as well as cut and snig costs.

Mill gate price is the price of a forest product delivered to the purchaser. The mill gate price reflects the stumpage, cut, snig and haulage costs.

$$\text{Mill gate price } \$/\text{m}^3 - (\text{cut } \$/\text{m}^3 + \text{snig } \$/\text{m}^3 + \text{load \& haul } \$/\text{m}^3) = \text{STUMPAGE}$$

2.2 The Timber Product Value Hierarchy

Depending upon input costs, (impacted upon by a large range of variables), the product that appears to be higher in the “value” order may result in a significant reduction in revenue or \$ returns compared to another product.

“Relative value” is a good indicator.

Relative value is the value of a product when compared to its wood volume. We compare relative value by bringing all available wood products for a property down to a common denominator i.e. dollars/cubic metre (\$/m³).

Stumpage values for a range of products are often quoted in various forms. For example sawlog \$/m³, poles \$/length, piling \$/lm, fencing timbers \$/piece and so on. At first glance it is easy to assume there is a natural scale to these products but when they are compared against each other on a “stumpage” \$/m³ rate, there can be some surprising results. Remember it is important that stumpage/m³ is compared, not mill gate price \$/m³ or on site processing such as splitting a post.

For example: A 2.1 split post at stump is generally able to return \$4 after costs. An average split post has approximately 0.04 m³ of wood volume per post. At this volume it would take approximately 25 splits to make 1 m³. When comparing the “relative value” per cubic meter of split posts i.e. 25 x \$4 = \$100/m³ to other products taking into account all input cost it is often surprising to realize the true

hierarchy of values. This is also impacted upon the ability to access the market based on critical mass, haulage distance, appropriate machinery, skills, time, etc. This basic equation is of tremendous importance when deciding what product a log should be merchandised into. Obviously in this example the log has two options if it is durability class 1 species and has enough degrade to cause it to be classed as a salvage grade log i.e. pipe. This log could be classed as salvage, say at \$50/m³ stumpage or ripped into split post at \$100/m³ stumpage. It is an easy comparison, yet it takes knowledge of products, specifications, suitable species and merchandising management to make this decision.

The value hierarchy is always site specific!

2.3 Know Your Timber Markets

There are many markets for wood products and not all are applicable to every landowner. For example, site characteristics such as species, average tree bole length, wood quality, etc are variable. So is the harvest setup - is the contractor the purchaser or is the landowner performing the harvest. Finally, market access for a product is determined by distance, volume, current market demand, specific purchaser pricing, etc.

Landowners should not assume that simply because a certain stumpage value for a certain product type is being achieved in one location that this stumpage value will be applicable to their products.

When preparing for a timber sale it is worthwhile considering cooperation between adjacent landowners who also may have timber ready for sale. This form of co-operation does not need to be any more involved than accessing markets with greater volumes. Cost Efficiencies can be achieved for harvesting operations simply by halving the costs of floating machinery and with the increased product supply can be a positive stumpage barter point.

Sawmills are not the only purchasers to approach. Timber treatment plants that wholesale poles, piles, stumps, etc and sliced veneer mills are worth investigating. Once a number of purchasers have shown interest in your timber it is then possible to get a range of prices. In times of higher demand a \$/m³ increase can be achieved. When a sale of a large volume is being contemplated, the difference in return could be substantial.

The applicable forest products for any landowner will vary from one area to another depending upon a range of factors. Obviously species, merchantable length, available volume, etc all have an impact. The variable that has the greatest impact upon market access is the distance to the prospective purchasers. Some of the forest products that may be sold in your area could include: Sawlogs, veneer billets, salvage grade logs, poles, piles, mining timber, bridge girders, and a range of fencing material (Splits, rails, caps, strainers and stays). You may have a property that grows the best quality poles in Queensland yet is 700 kms from the nearest pole purchaser. This is not to say that



Photo 1. A variety of poles sizes presented ready for inspection

when demand is high, buyers would not wear the extra cost of long haulage, but knowing the state of the market is critical to this decision.

For each forest product there are specifications that need to be met in order to access the market. For some products such as poles, veneer logs and girders the specifications are particularly tight and uniform throughout the industry. The degree of variance from the specifications is limited by Australian standards, industry standards or building codes.

For other forest products such as piles, fencing material and to a degree sawlogs there is some variability from one purchaser to another. This is especially common with piling material even though there is an Australian standard. Minimum product length, small end diameter, centre diameter, allowable defect and species requirements vary from one purchaser to another. It is very time consuming, expensive and frustrating to deliver even one load and have it rejected.

If you land timber in the purchaser's yard, you risk the purchaser rejecting the products. You may have to accept a lower price or pay for the haulage to another purchaser. The easiest way of avoiding this situation is to negotiate all specifications, cut a sample load and then have the purchaser inspect the product on the harvesting ramp/dump before haulage. You should have a proper timber sale agreement/contract – contact PFSQ for the range of 'model' contract agreements they have available for landowners and industry.

Contacting local timber merchants/saw millers should identify the applicable products, stumpage value and their minimum specifications in relation to species, amount of defect, length and diameter. This information alone may not necessarily give you enough information of who to sell to.

Price alone should not be the determining factor for making a sale. For example a sawmill may not even be interested in some of the species you have for sale whereas the another will purchase all or most of the species, this may have a major impact on your financial returns and how you manage your harvest. One mill may offer \$140/m³ for sawlog grade material and \$50/m³ for salvage grade logs compared to a second mill that offers \$125/m³ and \$45/m³ for salvage. The first mill's sawlog specifications may push 50% of your A grade logs into the salvage class, where as the second mill may take the majority of your logs as A class grade. In addition to this variable quality standard, the second miller may in fact pay you on a 14-day account; whilst the first sawmill on 60 days + before payment. In addition to price, the post harvest condition of the forest should be a major consideration as a higher price received may be reflected in the way operations are performed and compromises in forest protection may be experienced.

There are many other scenarios, which prompt the simple recommendation "Do Your Homework" – ask other landowners of their experiences! It is not difficult to find out the properties that have been harvested by your potential purchasers in the past. It may be possible to inspect a block that was cut in the last 6 months and assess the utilisation level, damage to retained trees and drainage of snig tracks. Landowners are often prepared to talk about their experiences, concerns and recommendations relating to communication, payment history, etc.

Landowners who have the suitable skills, knowledge and equipment can achieve higher stumpage values by doing all or part of the harvest operations that reduces cut, snig and haul rates.

Major causes for the reduction of landowner stumpage

- | | |
|---------------------------------|---|
| • Available volume | • Property terrain e.g. Steep, rocky |
| • Distance from the market | • Average snig distances to loading ramp |
| • Product length | • Product quality |
| • Product diameter | • Species mix and market demand |
| • Property access, road quality | • Poor product recognition and presentation |

2.4 Product Merchandising

There are many product options that may be suitable for any one log length. For species that are durability class 1 such as: Iron bark, tallowwood, Grey gum, Gympie messmate, Bloodwood, etc the decision on what product should be merchandised becomes even more complex. Landowners who are aware of product options and values are in a position to increase their returns.

The following examples demonstrate the effect of different merchandising decisions on the potential \$ returns:

Example 1.

Species = Grey gum

Log length = 17 m

Centre diameter under bark = 37cm

Log Straightness = very

Durability class = 1

Small end diameter = 29 cm

Defect = Small clean pipe, say 30mm in diameter

Log volume = 1.83 m³

What are the potential product options?

Pole = 17m 20 kn @ \$420

Veneer Billets = 3 x 2.7 m (8.1 x 40) @ \$250/m³
 + 1 x 3.6 x 32 cdub sawlog @ \$120/m³
 1 x 4.8 x 28 \$ 50

What are the potential stumpage values?

\$420

\$255

\$ 50

\$305 72% of pole value

A grade grade sawlog = 1.53m ³ @ \$120/m ³	\$183	} \$198 47 % of pole value
B Grade sawlog .296 m ³ @ \$50/m ³	\$ 15	

Obviously a significant difference if you know what constitutes a pole. If the log will not make a pole for some reason, it still may be better to go down to the next highest value option, if that market is available in your situation. It can take three extra cross cuts with the chainsaw to increase the stumpage by 60%.

Another example is the difference of a durability class 1 log with no pipe, but small diameter that makes it salvage grade compared to cross cutting the same log into strainer posts.

Example 2.

Species = White mahogany
Log length = 4.8 m
Centre diameter under bark = 29cm
Log Straightness = Middle bend

Durability = 1
Small end diameter = 27 cm
Defect = clear wood
Log volume = 0.32 m³

What are the potential product options?

Fencing strainers = 2 x 2.4 @ \$25/ length

Salvage grade sawlog = 0.32m³ @ \$50/m³

What are the potential stumpage values?

\$50.00 = \$156/m³

\$ 16 = \$50/m³ - 32% of Strainer value

3.0 Timber Product Descriptions

3.1 Poles

It is estimated that there are 5 million timber utility poles in Australia with a current net worth of 10 billion dollars. In South-East Queensland alone, there are 500 000 poles in service. Poles are amongst the highest valued forest products, although it is the larger sizes that are by far the more valuable. It is extremely important to understand the regulatory guidelines (AS 2209-1979) that govern if a log meets the pole standards. Stumpage range from \$70- \$250/m³



Photo 2. Load of poles ready for delivery

Electrical transmission poles vary from a minimum of 9.5 m long and 225 mm diameter under bark (ub) 2 metres from butt end (D-line), through to 30.5 m long, a D-line 565 mm diameter ub . Table 1. below is an abridged version based on the most popular sizes.

Table 1. Pole Values and Specifications (S2 strength group species) (2017)

Pole Length m	kN	D-line diameter	SED	Critical zone measured from butt (m)	Pole Stumpage (\$)
9.5	5	22.5	15.0	0.950 to 2.550	26
9.5	8	26.5	18.5	0.950 to 2.550	43

11.0	5	24.0	15.0	1.100 to 2.700	39
11.0	8	28.0	18.5	1.100 to 2.700	65
11.0	12	32.0	22.0	1.100 to 2.700	93
12.5	5	25.0	15.0	1.250 to 2.850	55
12.5	8	29.5	18.5	1.250 to 2.850	91
12.5	12	33.5	21.5	1.250 to 2.850	129
14.0	5	28.5	16.5	1.400 to 3.000	75
14.0	8	30.5	18.5	1.400 to 3.000	122
14.0	12	35.0	21.5	1.400 to 3.000	177
14.0	20	42.0	26.5	1.400 to 3.000	251
15.5	8	32.0	19.5	1.550 to 3.150	156
15.5	12	36.5	23.0	1.550 to 3.150	245
15.5	20	43.5	28.5	1.550 to 3.150	386
17.0	8	33.0	20.0	1.700 to 3.300	203
17.0	12	38.0	23.5	1.700 to 3.300	313
17.0	20	45.0	28.5	1.700 to 3.300	480
18.5	12	39.0	24.0	1.850 to 3.450	397
18.5	20	46.5	29.0	1.850 to 3.450	606
20.0	12	40.0	25.0	2.000 to 3.600	491
20.0	20	47.5	29.5	2.000 to 3.600	742

Some of the limiting factors in pole specifications are:

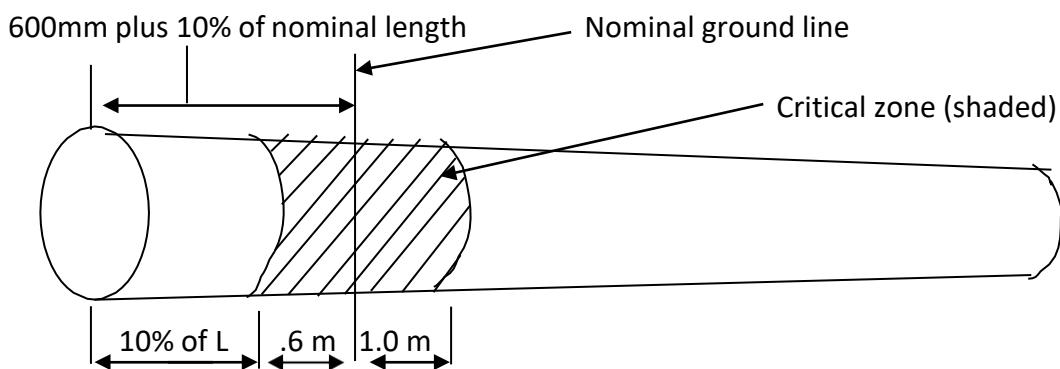
- No fault in critical zone (approx 1m to 3m from butt end depending on length)
- No two faults per metre above critical zone, max of 6 (encased bark must be drained)
- Branches cut flush with bark (encased bark must be drained)
- Presence of rot or insect attack
- Degree of pipe or gum veins.
- Thickness of sapwood
- Degree of mechanical damage
- No 'Dry Side'

Table 2. Pole Species of SE Qld

Trade Name	Botanical Name	Strength Group	Durability Rating	Lyctid Susceptible	Min sapwood Thickness
Grey Gum	<i>Eucalyptus major</i> , <i>E. propinqua</i> and <i>E. longirostrata</i>	S1	1 highest	Resistant	12mm
Grey Ironbark	<i>E. siderophloia</i>	S1	1	Resistant	12mm
Blackbutt	<i>E. pilularis</i>	S2	2	Resistant	12mm
Broad Leaved Red Ironbark	<i>E. fibrosa</i>	S1	1	Resistant	12mm
Grey Box or Gum-Topped Box	<i>E. moluccana</i> <i>E. woollsiana</i>	S2	1	Susceptible	12mm
Gympie Messmate	<i>E. cloeziana</i>	S2	1	Resistant	16mm

Narrow Leaved Red Ironbark	<i>E. crebra</i>	S2	1	Resistant	12mm
Red Mahogany	<i>E. resinifera</i>	S2	2	Susceptible	12mm
Spotted Gum	<i>Corymbia citriodora</i>	S2	2	Susceptible	12mm
Tallowwood	<i>E. microcorys</i>	S2	1	Susceptible	12mm
White mahogany/ Yellow Stringy	<i>E. acmenoides</i> <i>E. umbra</i>	S2	1	Resistant	12mm
Forest Red Gum	<i>E. tereticornis</i>	S3	2	Resistant	12mm
Red /Pink Bloodwood	<i>C. gummifera</i> & <i>intermedia</i>	S3	1	Susceptible	12mm
Turpentine	<i>Syncarpia glomulifera</i>	S3	1	Resistant	12mm
White Stringybark	<i>E. eugenoides</i>	S3	2	Resistant	12mm

Figure 1. - Critical Zone (no fault zone - grub holes, knots, mechanical damage)



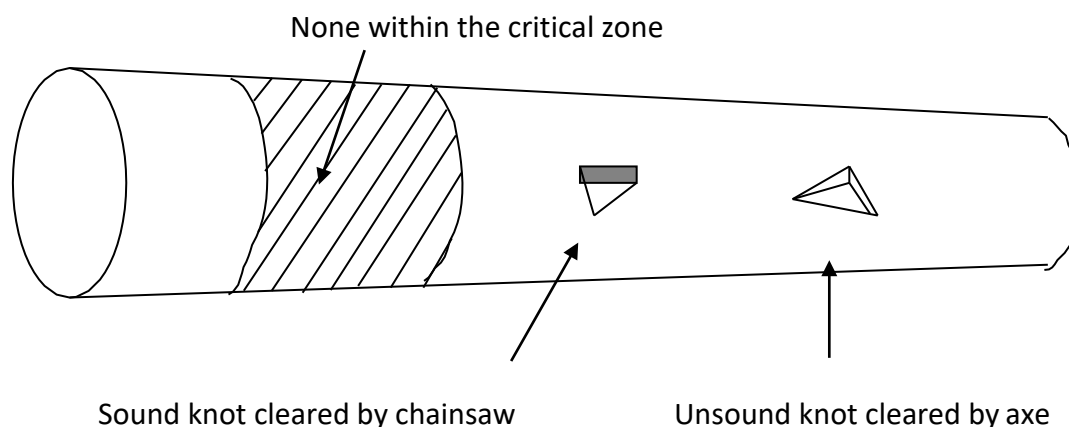
Unsound Knots

A knot is the remaining portion of a branch once it is trimmed back with the chain saw. 'Unsound' usually means the knot has either rot associated with it, is not solid across the face, is checked or split and is a defect on the surface of a pole. This allows moisture to accumulate in the defect and leads to decay inside the treated exterior. This defect needs to be drained (cleared). This can be accomplished with the tip of the chainsaw trenching out the defective section allowing it to freely drain when the pole is in an upright position. The specification for knot-size is outlined below.

The size of the knot is measured as the distance between two lines parallel to the longitudinal axis of the pole and enclosing the knot or cluster of knots. The diameter of a knot is measured across the dark sound wood of the knot.

Where an unsound knot is drained (i.e. nosed out with a chainsaw), the width of the clearing must not exceed 10% of the circumference the pole at that point and the depth no more than 5%. No cleared knots are permitted in the critical zone and no more than six are permitted elsewhere in the pole. Unsound knots outside the critical zone must be spaced more than 1 metre apart. For example a pole, which has a circumference at the point of the unsound knot of 800 mm, may be cleared to a maximum of 80 mm (10%) in width and 40 mm (5%) in depth and must be self-draining.

Figure 2. – Unsound knots

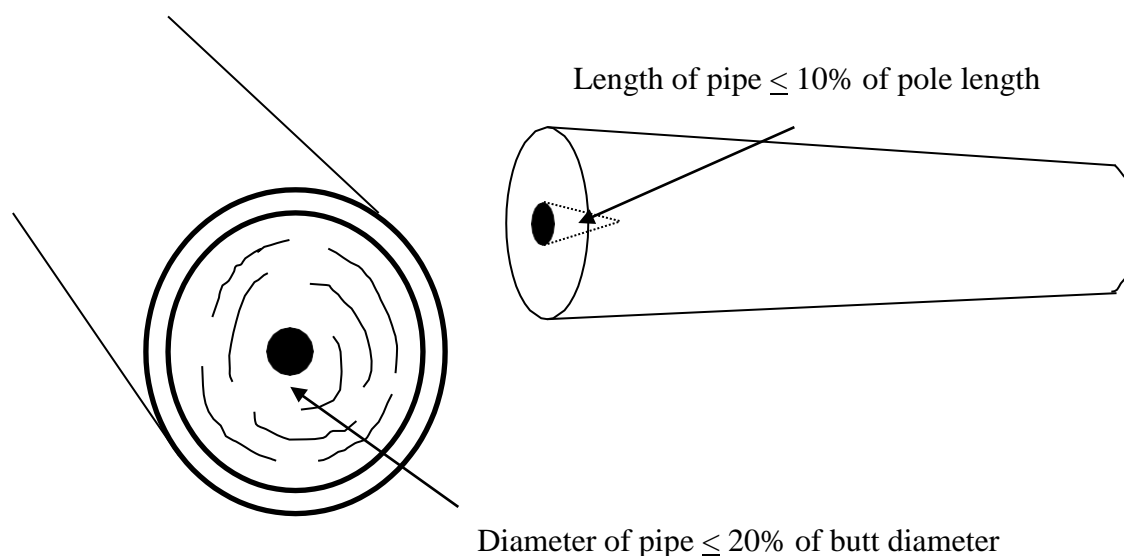


Pipe

Pipe is a longitudinal cavity along the centre of a log as the result of the breakdown of the wood in the tree's centre by growth stresses, fungal and/or termite attack, and/or biochemical means.

A pipe which is not associated with any decay would be tolerated at the butt end of the pole provided that the diameter of the pipe does not exceed 20% of the diameter of the pole at the butt, and the length, after all obstructions have been cleared, does not exceed 10% of the overall length of the pole.

Figure 3. – Allowable pipe for poles



Ring Shakes, Loose or Open Gum Veins and Encased Bark

A ring shake is a partial or complete separation of adjoining layers of wood due to causes other than drying and usually originating either in the standing tree or in the log during felling or processing.

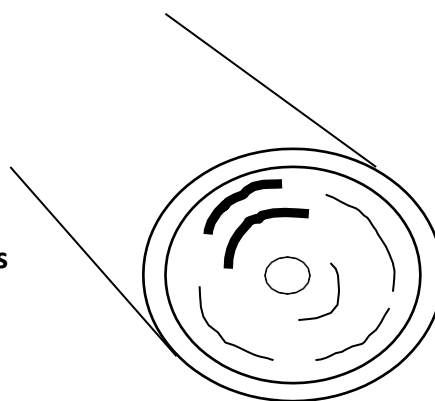
Gum veins are ribbons of gum (kino) between growth zones, which may be bridged radially at short intervals by wood tissue. Gum veins can develop in trees as a result of injury to the cambium layer. Some species, such as the Bloodwoods, are especially prone to gum vein development and there are some indications that they may be influenced by genetic as well as environmental factors. A loose gum vein is one associated with extensive discontinuity of wood tissue.

Ring shakes and loose or open gum veins visible at the head of the pole and within 38 mm of the edge, or within 25 mm of the edge at the butt, must not exceed two in number and individually must not exceed 10% of the circumference of the pole. Encased bark associated with double heart must not be closer than 50 mm to the edge at the head of the pole.

Ring shakes and loose or open gum veins within 40mm of the surface at the head of the pole or within 25 mm of the surface at the butt-

- ≤ 2 in number
- Individually $\leq 10\%$ of the circumference

Figure 4. – Allowable ring shakes or open gum veins



3.2 Construction Piles

Piles are like poles except that the small end of the log is driven into the soil until the length is underground. The pile is then used to anchor and support concrete slabs being laid over suspect ground. Specifications are similar to poles but piles usually have less stringent defect specifications e.g. No critical zone. Piles are classified by length and small end diameter (SED) and are saleable down to as small as 4 m with a 150 mm SED.

The pile market is very much industry demand driven in relation to building development sites requiring piles to stabilise the site and on the building specifications requiring wooden piles as opposed to concrete piles.

Before cutting piles ensure there is a current available market.



Photo 3. Load of piles ready for delivery

Common pile sizes

Length (m): 4.0, 6.0, 8.0, 9.5, 11.5, 12.5

Small end diameter (under bark) classes: 150 – 179 mm, 180 – 199 mm, 200 – 219 mm, 220 – 249 mm

Note: The 150 mm small end class is only usually applicable to 9.5 m lengths and under.

The greatest market demand is for sizes: 6.0, 8.0 and 9.5 m @ 150, 180 and 200 SED

Australian Standard (AS 3818.3-2001) provides specifications in relation to species, defect, strength grading, etc. Prices are highly variable, as a guide landowner stumpage for common sizes is between \$70 - \$100/m³.



Photo 4. 6m pile after being barked

Pile Presentation and Specifications

- The butt end and the toe cut square
- The bark shall be removed.
- A nominal amount of end cracking is permissible.
- Length not exceeded by more than 200mm.
- The diameter at the toe shall not exceed the specified diameter by more than 50mm.
- Straightness, a line joining the mid point of the toe to the mid point of the butt must lie within the pile), but many merchants require a higher standard.
- Spiral grain at the surface to the axis of the pile shall not exceed 1 in 10 when measured over any 1 m of its length.
- Tong and cant hook punctures – kept to a minimum
- Dry side allowable in piles of durability 1 & 2 species, width – not exceeding one tenth of the circumference of the pile.
- Grub/Insect holes to be not greater than 30mm diameter.
- Species, which are susceptible to Lyctid borer attack, may need to be sprayed with a synthetic insecticide after felling to prevent degrade while in storage before preservative treatment.
- Pipe at butt end only – not exceeding 35mm and not extending one tenth of the pile length.
- Orders may nominate one or more species, stress grade and durability class.
- Pile species include, Spotted gum, Blackbutt, Grey box, Messmate and Greygum.



Photo 4b. Wooden Piles being driven into unstable ground

33 House poles and stumps

Length: 2–8m

Minimum Diameter: 25cm SEDUB **Maximum Diameter:** 35cm SEDUB

Acceptable Species:

Spotted gum, Grey box, Grey gum, Narrow-leaved red ironbark, Grey ironbark, Tallowwood, Gympie messmate, White mahogany and Turpentine

Timber Durability Class:

Durability class 1 and 2 species

Straightness: very straight, very round (cylindrical)

Pipe: Nil **Spiral Grain:** Nil

Other defect: No mechanical damage from skidders, barking or cant hooks. Dry side is unacceptable as are grub holes and severe end cracking.

Market demand: Well services as a by-product of sawlog and pole sales.

Stumpage range: Stumpage ranges from \$70.00–\$100.00 per m3

Other considerations:

- Species, which are susceptible to Lyctid borer attack, may need to be sprayed after felling with a synthetic insecticide to prevent de-grade while in storage awaiting preservative treatment.

34 Sliced Veneer Logs

Length:

Varies with processor, commonly 2.7, 3.0 and 3.3m lengths or multiples of 2.7, 3.0 and 3.3m, such as 5.4, 5.7, 6.0m etc.

Minimum Diameter:

Small end diameter under bark (SEDUB) = 40cm

Acceptable Species:

Very dependent on demand

Spotted gum, Blackbutt, Red/Grey ironbark, Brush box. Other species need to be confirmed before harvesting.

Timber Durability Class: Class 1, 2 and 3

Straightness: Very straight with heart of log in the centre

Pipe:

A small pipe will be accepted on logs with a small end diameter over bark of 45cm or greater.

Spiral Grain: As per inspection by purchaser

Other defect: No borers or other insect attack, wire worm, wind shakes or ring, fungal decay, knots or limbs.

Market demand:

Timber veneer is a market that is affected by the general building industry and trends set by architects. Generally, the volume of the most common species required on an annual basis is between 5 000m³ and 15 000m³. Single loads of 20m³ of quality billets are accepted.

Stumpage range:

Stumpage ranges from \$270.00–\$320.00 per m³.

Other considerations:

- Where multiple log lengths are presented i.e. a 5.4m log representing 2 x 2.7m, a small defect such as a limb can be included at the point of the future cross cut.
- Logs should be proven and presented for inspection.

35 Bridging Girders

There are two standards for Girders Railway and Main road girders and are measured by length and potential dressed size

As straight as possible. Logs may be accepted as Girder timber even if they are not perfectly straight providing they contain sufficient heartwood to allow them to be dressed into **straight** octagonal girders.

Pipe: ≤ 50mm free from decay

Other defect: Solid limbs may only be included in the first and last third of the girder length. No limbs are acceptable within the middle third of the girder.

Main Roads Girders

Length:

9.0, 9.3, 9.6, 9.9, 10.2, 10.5, 10.8, 11.1, 11.4, 11.7, 12.0 meters

Small End Diameter

Minimum small end diameter under bark: 44.0 cm

Able to achieve a 40 cm diameter girder (Dressed size)
Able to achieve a 42.5 cm diameter girder (Dressed size)
Able to achieve a 45.0 cm diameter girder (Dressed size)
Able to achieve a 47.5 cm diameter girder (Dressed size)

Railway Girders

Length: - 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5 meters



Photo 5. Potential girder being inspected

Minimum small end diameter under bark:

Able to achieve a 43.5 cm small end diameter girder (Dressed size)

Stumpage range:

Stumpage range from \$250.00–\$350 per m³

3.6 Sawlogs

Sawlogs are one of the standard products that come from forests. Sawlogs at this stage must have at least 300mm small end diameter and be a minimum of 2.4m long increasing in 0.3 m increments, plus 0.1 m for each cross cut. Stumpage for sawlogs range from \$100/m³ to \$125/m³ depending on the quality of the logs, species, demand and distance from the mill.

Sawlog specification Guide

- Limbs affecting less than 50% of the circumference of the log at any point,
- End of log defect affecting less than 50% of the end section (large diameter), 25% small diameter
- Degree of bend, this varies with centre girth, (as a guide, - 40 cm - 2.5°, 40 – 49 cm - 5°, 50 cm+ - 10°), often a bent log can be cut into 2 shorter straight logs
- Gum vein, ring shakes, etc
-

Table 3. Sawlogs Specifications

Centre Diameter of Log under bark (cm)	Allowable Pipe Diameter (cm)	Maximum Bend in °
30-34	5	2.5 °
35-39	17	5 °
40-44	20	5 °
45-49	24	5 °
50-54	24	10 °
55-59	28	10 °
60-64	34	10 °
65-69	38	10 °
70-74	42	10 °
75-79	45	10 °
80-84	48	10 °



Photo 6. Quality sawlog butted for presentation

3.7 Salvage Grade Sawlogs

Salvage grade logs are of poorer quality than standard Sawlogs. Salvage classification is given to logs failing sawlog specifications due to pipe size, number and size of limbs, degree of bend or small end diameter. Many mills will accept salvage grade logs with a SED (under bark) of 26 cm and usually ≥ 2.4 m billets; occasional 2.1m are accepted. Stumpage for Salvage grade logs ranges from \$30/m³ to \$50/m³.

3.8 Landscape Sleeper Blocks

Length: 2.4m

Minimum Diameter: 25cm SEDUB, very straight small diameter logs should be able to yield two sleepers.

Common Species: Forest red gum, Grey gum, Grey box, Ironbark, etc

Timber Durability Class: Durability class 1 and 2 species

Defect: Capable of yielding 2 x 200mm x 50mm landscape sleepers

Market demand: Variable and numerous outlets with constant product demand. Well serviced. Stumpage range: \$35.00–\$50.00 per m³

3.9 Mining Timber Billets (Very limited demand)

Length: 2.4m increasing in multiples of 0.3m

Minimum Diameter: 25cm SEDUB

Acceptable Species: Standard sawlog commercial species such as Spotted gum, Ironbark, Bloodwood, etc and traditionally non-commercial sawlog species such as Smooth bark apple, Swamp box, Acacia's, etc.

Timber Durability Class: Durability class 1, 2 and 3 species

Straightness and Pipe: As applicable to salvage grade sawlog
As applicable to salvage grade sawlog

Market demand: Dependent upon mining industry. Generally logs supplies for this product are in good supply.

Stumpage range: \$20.00 per m3 within 200 kilometers of the mill.

Other considerations:

- Market for structural sawn timber into the mining industry for short term use in underground mining. It is believed to be a market worth in excess of \$5 000 000 to the sawmilling industry.
- There are only a few sawmill's specializing in this type of material with one of the largest located at Dingo in central Queensland.

3.11 Fencing Material

Fencing material includes strainer posts, split posts and rails. Species preferences vary between districts. Fencing material is a good option for trees that are suppressed or have bad form. The durability of the species is important. Timber for caps and rails can be class 2 species and unless appropriately treated with preservative, posts and strainers need to be durability class one species.

Generally fence timbers need to be slow grown with little sapwood. Due to the thick sapwood often associated with Red bloodwood (unless very slow grown) rounds need to be sapped, but even so is often not well regarded. Big old trees suitable for splitting are the opposite and considered to be nearly as good as Yellow stringybark.

All fencing material needs to be well presented, debarked and any branch stubs and branches trimmed back to the round of the post. Fencing material ranges from \$50.00 to \$90.00 per m3.

Specifications for fencing timbers are as follows:

Yard Posts: 25-40cm SED x 2.4m long or as specified, can have trimmed branches, must be straight and be **durability 1** species.

Stumpage range: \$20.00–\$30.00 per post

Strainers: 20-25cm SED for driven posts, 20-35cm SED for rammed, 2.4m long, trimmed branches, can have wobbles or one bend if rammed, and be **durability 1** species.

Stumpage range: \$18.00–\$20.00 per post

Light Strainers or in Line Round Posts: 15–20 cm SED usually driven, 2.1m Long, straight, and be **durability 1** species
Stumpage range: \$5.00–\$8.00 per post

Splits = 12.5–15cm SEDUB arc measurement, 2.1m Long, and be **durability 1** species
Stumpage range: \$2.00 – \$3.00 per post

Caps and Rails: Usually 15cm SEDUB often requested to match size of posts, usually 3m Long, and be durability 1–2 species
Stumpage range: \$8.00–\$10.00 per rail/cap

Stays 10–15cm SEDUB, can be a bit bent, little sap, 3m Long, and be **durability 1** species
Stumpage range: \$8.00–\$10.00 per stay



Photo 7. Strainer Posts, barked and docked to length

Other considerations:

Fencing timbers are in high demand along the coastal belt, with many regions experiencing supply shortages. Haulage of large loads can be profitable from long distances given sufficient research into rural and landscape supply stores in semi-rural areas. Desirable species vary from location to location depending upon the history of species use in the area, for example: some regions only desire Yellow stringybark, some Red ironbark and others preferring Bloodwood or Grey gum.

3.12 Firewood

The firewood market is quite large in some regions and firewood is a good option for trees that are suppressed, dead, have bad form or salvaged from logging debris. Firewood needs to come from trees species that are suitable to burn. The most common species are; Grey box, Ironbarks, She oak, with differences in preference from region to region. Firewood is usually presenting in block form suitable for splitting or split ready for delivery or pick up. Firewood is often sold by the tonne, utility load, truck or trailer load. Firewood stumpage is approximately \$10.00 per m³.

Other considerations:

The firewood market is obviously mostly seasonal. There are still many houses in the Central Burnett that have wood fired stoves and fireplaces. Access to the market is usually via local advertisements in papers.

3.13 Slabs

Slabs are used for furniture manufacture. The slabs are cut from large diameter logs but mostly from reject material and tree heads left in the bush following a traditional sawlog harvest. Slab size is normally 50mm+ in thickness with length and width determined by the material being cut. The slabs are normally cut on site or logs transported to a fixed portable mill site. Markets and prices need to be sourced within the furniture manufacturing industry.

Bark to bark slabs are fairly common given the limitations of the market size. The market is easily over supplied. Stumpage for logs suitable for slabs ranges from \$300.00–\$800.00 per m3 depending upon species. The most common slab species include: Forest red gum, River red gum, Tallowwood, Sydney blue gum, Grey gum and some scrub-woods.



Photo 8. Bookend Slabs

3.14 Seed

Seed is an unreliable product that timber growers may have little control over, but can be another sustainable product worth harvesting. Generally higher prices are paid for species and provenances that are in demand and some rarer species demand high prices.

Other considerations:

Collection of seed is best undertaken at harvest when tree heads are easily accessible. The capsules need to be removed immediately or the capsules will open and seed will be lost. After removing the capsules, they are placed on a tarpaulin where the capsules will generally open within three days. Care must be taken to sieve the seed, separating it from capsules and other extraneous matter.

Seed should be selected only from superior form trees.

If possible a photo should be taken of the select tree prior to felling.



Photo 9. Eucalypt seed capsules containing mature seed

Disclaimer:

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