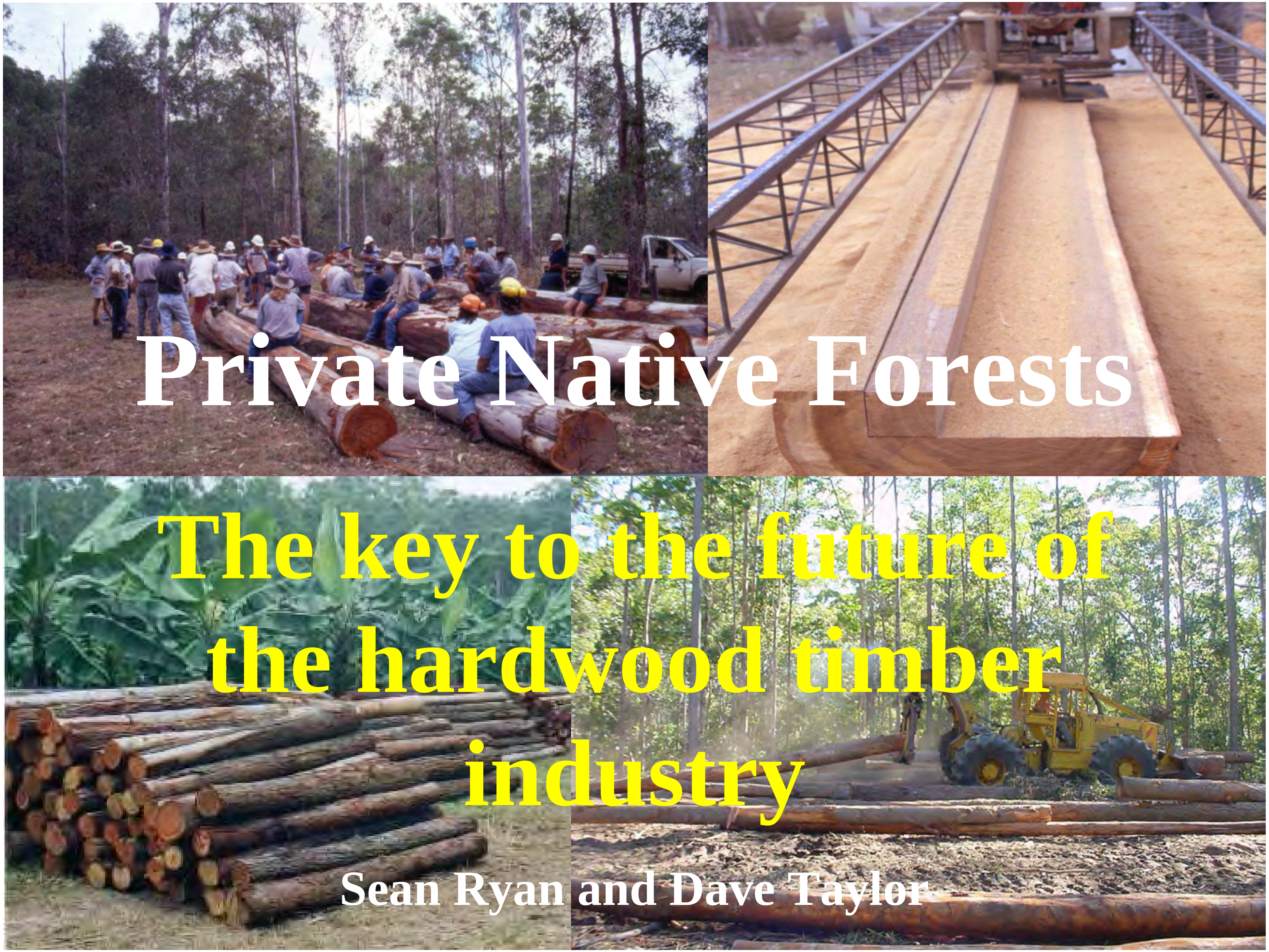
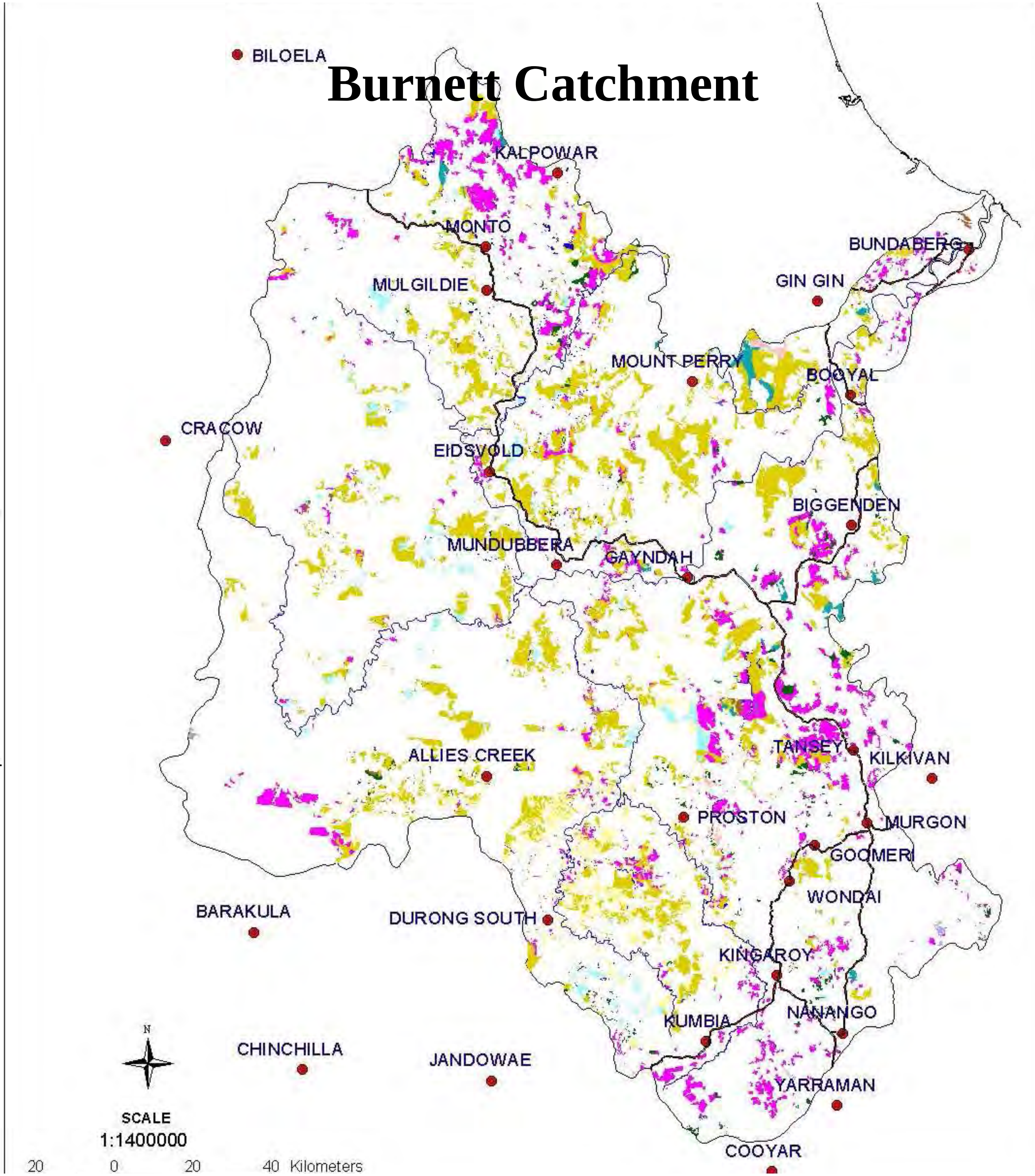
Private Native Forests

The key to the future of the hardwood timber industry



Sean Ryan and Dave Taylor

Forest Type	Area
Mixed Spotted Gum	**271,742**
Mixed Ironbark	**119,235**
Mixed Box	**32,921**
Mixed Yellow St	**10,830**
Total PNF	**517,559**



History

1804 - First export to HM Dockyards

1828 - 36 7.5 m super feet, Red Cedar &

2 m super feet Blue Gum

Early 1900's - Qld State Forests established

1919 - treatment for overstocking commenced

1930's – treatment of up to 25,000 ha /yr

Late 40's surged again to 20,000ha/yr and again

in the 1960's with the introduction of phenoxy herbicides

1974 economic rationalists deemed it uneconomic

Treatment was based on

- The removal of useless stems from the stand,
- Selection of the retained stand based on potential, and
- Thinning of the remainder of the stand where necessary.

SEQ FA Area

95/96 ABARE survey

- **97 mills employing >1000 people**
- **8 mills >10,000m³/yr , 45 <1,000m³ sawlog inputs**
- **339,000m³ total sawlog input, 62% sourced from private resource**
- **2001 - 165,000m³ sawlog input, 67% from private resource**

Native Forest Production - SEQ FA Region

State Allocation

Pre 1999 – Approximately 100,000 m^3/yr

2001 – 54,600 m^3/yr

2010 – 49,120 m^3/yr

2024 –plantation grown Hwd available but no guaranteed supply

Private Native Forests 7%/yr productivity drop in last decade

1994-95 – 180,000 m^3/yr

2000-01 - 111,000 m^3/yr (Forestry Year Book)

Issues Limiting the Adoption of NFM by Landholders.

- Lack of PNFM ethos
- Lack of information and data regarding silviculture, economics and marketing
- Landholders unconvinced of the economic benefits of sustainable management after poor returns from previous harvesting
- Degraded resource from past management practices
- New owners buying up, stripping forests and then clearing for grazing

The 4 Four categories of PNF Condition

1. Young regrowth derived from lignotubers or seedlings
2. Unmanaged advanced regrowth
3. Well managed forests often incorporating Grazing
4. ‘High-graded’ forests dominated by damaged and suppressed trees often with degraded old snig tracks and log dumps

Demonstration Sites

Miva - 225ha Property

'High-Graded' Mixed Spotted Gum Stand 10 years on

	DBH Class (cm)				
	10-20	20-30	30-40	40+	Total
Original stand	91	93	69	-	253
Residual Stand	18	42	30	-	90

Merchantable products/ha	$1,400
Cost of operation/ha	$700
Cost of treatment/ha	$200
Stand marking and marketing/ha	$200
Return/ha	$310

Wamuran –

Unmanaged Moist Regrowth Forest

DBH	Av stocking pre treatment	Treated to 10x10	Control
40+	20	6	12
30-40	68	37	56
20-30	165	50	225
10-20	308	6	475
Total	561	100	769

Species mix

- Grey Gum
- Grey Ironbark
- Yellow Stringybark
- Gum Topped Box
- Broad Leafed Red Ironbark

Wamuran products, costs and return / 2 ha

Product	Number	Value ($)
3m Rails	181	1,810
2.1 heavy Strainers	51	510
Light strainers	200	1,800
3m stays	100	500
2.7 Yard posts	49	735
2nd Class Sawlog	1.76m^3	65
Total/2 ha		5420
Total Costs/2ha		2,878
Return/2ha		2,542

Gundiah

Thompsons – 2,100ha property

Well managed mixed Spotted Gum Forest

Dbh Class (cm)							
10-20	20-30	30-40	40-50	50-60	60-70	70+	Total/ha
70	23	18	8	7	5.3	1.5	133

Species mix

- Spotted Gum 53%
- Grey Ironbark 19%
- Forest Red Gum 9%
- Gum Topped Box 5%
- Other 14%

86% Commercial species

Standing Volume 28.6m^3/ha

Harvested 10.6 m^3/ha

Sawlog \$104 /m^3, salvage \$50/ m^3

at dump(includes cut and snig @ \$22

Kin Kin - Unmanaged Messmate Forest

DBH Class (cm				
10-20	20-30	30-40	40+	Total/ha
158	107	68	57	Av 390

Stumpage value & Product Removals from 8ha

- Sawlog - 170m³ $10,568
- Salvage sawlog - 79m³ $ 1,035
- Piles – 418 lm $ 1,226
- Poles – 64 lm $ 1,821
- Split Posts - 2,450 $ 5,145
- Strainers, rails and stays -724 $ 5,422

Crow's Nest

DBH Class(cm)				
10-20	20-30	30-40	40-50	Total
95	47	13	8	163

Stand Characteristics

66%	NRI
13.5%	CAR
9.5%	RBA
6.6%	RBW
4.4%	SLI

8% - meet sawlog specifications

25% - had potential to meet sawlog specs

11% - intermediate but with potential to meet some product

43% - useless other than firewood

Standing Volume of sawlog, potential sawlog and intermediate – 11.97m^3/ha

Crow's Nest Products , Costs and Returns (4ha)

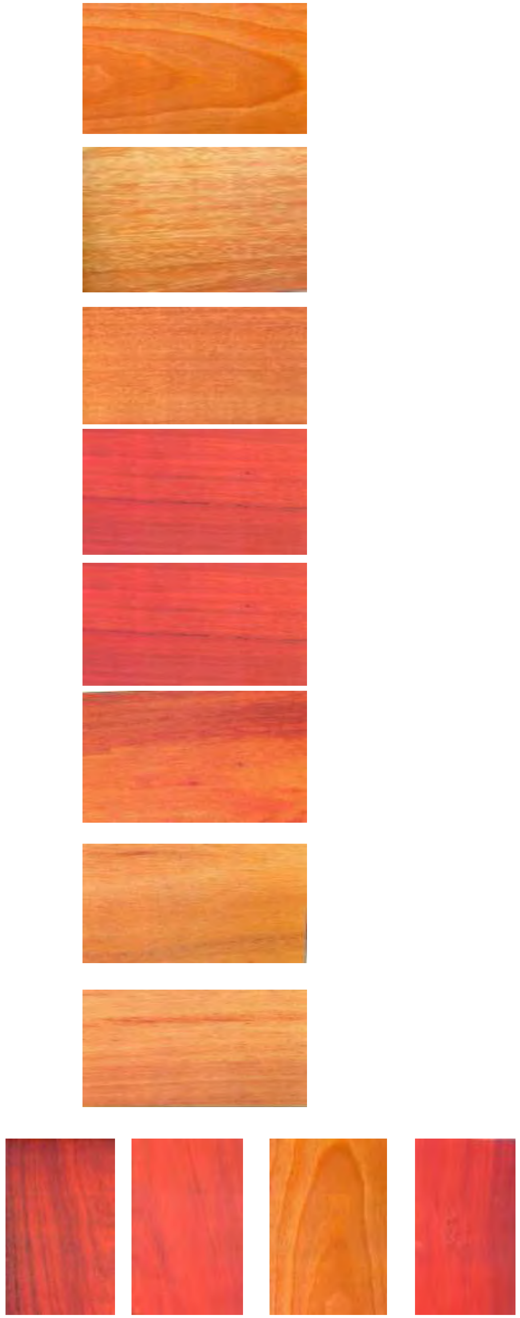
Product	Number	Value $
Yard Posts	14	252
Strainers	26	390
Rails	35	350
Stays	35	245
Light Strainers	6	72
Split Posts	20	120
Sawlog	5.67m^3	312
Total		1741

Task	Costs $
Paint Mark	120
Cut and Bark	320
Snig	800
Cut to waste	120
Inject	120
Total	1554

All work costed at contractors rates even when undertaken by landholder

Species Mix

- Spotted Gum 29%
- Blackbutt 20%
- Grey Ironbark 10%
- Broadleaf Red 5%
- Narrow Leaf Red 4%
- Brush Box 4%
- Yellow Stringy 5%
- Tallowwood 4%
- Others 19%



Plantation Production Risk Assessment

- Majority of plantations are made up of 2 species
- High risk factors associated with drought, cyclones and insect attack
- A fixed 25 year rotation length could result in very poor returns to the grower
- Growers will not participate in second round if poor economic outcomes
- 5,000ha of plantation realistically replaces 8 years of pre-RFA production
- The cost of 5,000 ha of plantation establishment is equivalent to 100,000ha of NF treatment

Conclusion

- **Private native forests supports a very significant resource**
- **Most of it is in a degraded state but is often cost neutral to rehabilitate**
- **The SEQ FA stake holder agreement included incentives for ESFM on private land but this has not eventuated**
- **ESFM is low cost with a wide variety of environmental and productivity outcomes**

Conclusion cont

Plantation production is inherently high risk due to

- Untested production
- Concentrations of the resource in a relatively confined area
- At risk from range of limiting factors such as drought, fire or cyclones
- 25 year rotation may result in poor economic returns to the grower

A variety of production scenarios need to be in place including private native forest as a major contributor