

may cause degrade to otherwise clear timber. When any of them are present in significant numbers they must be accounted for and accompany PLI results. The most common random defects, which must always be accounted for, are resin pockets. These are present at some level in all New Zealand stands of radiata pine.

The incidence of resin pockets (rp/m²) is defined as the number observed per square metre of sawn surface area in timber from the clear and intermediate (clear-cuttings) zones of pruned logs.

Degrade due to resin pockets varies depending on the combination of numbers present, their sizes, the timber grading/market criteria and the basic pruned log quality (PLI). Over the past 12 years Interface has derived market specific degrade factors for resin pockets and associated defects. That approach has now been abandoned because clearwood markets have become much more diverse and mills servicing similar markets have differing grading criteria. Rather, we have reverted to the generalised interpretations of resin pocket levels which were derived from 11 detailed sawing studies conducted in the late 80s and early 90s. Those generalised degrade classes have stood the test of time, remain directly relevant and are summarised in Table 1.

Table 1: Generalised Resin Pocket Classes

Log Descriptor Class	Resin Pockets (rp/m ²)	Degrade Class
A	<0.40	'Clean'
B	0.40 - 0.79	Minor
C	0.80 - 1.19	Significant
D	1.20 - 1.99	Problem
E	>2.00	Major

The Log Descriptor Classes A to E in the left column of the table are the resin pocket incidence classes referred to in the previous section on Pruned Log Descriptors.

The 'Clean' degrade class covers background levels of resin pockets present in all stands and should never warrant price adjustment. Logs in the Minor degrade class should experience few losses if cut to Mouldings and should also be generally very acceptable for most other purposes. Logs with Significant levels of resin pockets are in the transition and will prove more readily acceptable to some end-users than others. The remaining two classes are well described, for all purposes, by their names.

Education news: Enrolments up

Enrolments up at University of Canterbury School of Forestry

There are 32 first year forestry students enrolled at the School of Forestry in 2005 together with nine first professional year forest engineers – an increase of over 50% on 2004. The increase is a result of a number of factors including:

- an effort led by Associate Professor Euan Mason (with financial support from Carter Holt Harvey Forests and Wenita Forest Products) to increase the awareness of high school students and their careers advisors about forestry;
- the profile of the School being raised by Scholarships offered by companies as well as the University of Canterbury.

Undergraduate Scholarships for 2005

Winners of Scholarships for 2005 are:

Ernslaw One

Chris Pedley, Rotorua, BForSc

Kaingaroa Timberlands

Sally Haddon, Nelson, BForSc

Nelson Pine Industries

Jacob Saathof, Hastings, BE(For)

Rayonier New Zealand

Blair Cooper, Cambridge, BForSc

Weyerhaeuser New Zealand

Rebecca Coles, Timaru, BForSc

Lawrie Scott, Nelson, BForSc

University of Canterbury Emerging Leader Scholarship

Sarah Orton, Papakura, BForSc



Photo 1: Some of the 2005 undergraduate scholars at the School of Forestry (left to right: Sarah Orton, Rebecca Coles, Lawrie Scott, Sally Haddon, Jacob Saathof).

Postgraduate research scholarships

Two of the first 20 recipients of New Zealand International Postgraduate Research Scholarships will study at the School of Forestry in 2005. The scholarships are part of a new international scholarship scheme announced by the Government in May last year.

Horacio Bown from Chile is undertaking PhD studies on the "Impact of nutrient availability on conversion efficiency of solar radiation into biomass of radiata pine plantations in New Zealand".

Julian Moreno from Mexico is doing his PhD on "Prediction and segregation of wood properties for structural use and solid products using acoustic and other non-destructive methods".