

Why waste so much wood?

Stories from Europe

By: Bruce Smith.

A few years ago having purchased a small regenerating native forest block near Mundubbera, I decided I definitely needed to improve my forest skills and knowledge if I were ever to manage my block properly and maximize my income. I gained some knowledge through the usual local sources (mills, forestry professionals, trial and error, friends etc). In an effort to find out more about forestry, I went on a trip most Queensland forest people don't make. I first studied resource management and forest valuation in the Netherlands, and later worked for the venerable firm Scottish Woodlands UK Ltd, in Latvia and later as a general manager in Slovakia. In the three years I was based in Europe I worked in forest valuation, management and later in wood drying, processing and sales.

The Queensland forest industry, wood processing and sales have such a long way to grow, if only that growth could be better channelled than it is now. In this letter, for the interest of the reader, I would just like to give a few general facts and comparisons between the Queensland forest industries and my experiences in Eastern Europe.

A government that is committed to the growth of forest and wood processing industry can satisfy environmentalists, nature lovers, forest growers and big business wood processing. The Latvian governments past policy & management and its new forestry law 2000 is a beautiful example of how to write a law that satisfies all parties and leads to the general improvement in forest size, structure, biodiversity and growth of the forestry industry.

In the late thirties Latvia had approximately 25% of its land area covered by native forest and small wood processing industry. Today native forestry covers approximately 49% of the total land area and sustains the forest processing sector that is the largest contributor to GDP and the largest export earner. No environmentalist could deny the massive increase in native forest cover has highly benefited conservation of biodiversity, water quality, quality of life for the population, etc. etc.

All this is startling when you consider that the rotation cycle for Latvian native species (aspen, pine, spruce, alder, oak, birch) averages around 100 years. It takes real vision to commit time and money to plant a forest from which you will not see a benefit from harvest normally in your life time. But once the process is started and management is continued then there are always segments of each forest unit reaching maturity and providing income to sustain growers, industry and increase the forest area further.

Latvian Pine Forest



The Latvia Forest Policy (2000) is based around the following fundamental concept; Forests are the natural wealth of Latvia, which must be preserved and increased to meet society's ecological, economic and social needs. The general Forest Policy goal is the sustainable management of forests and forest lands. This is defined as the stewardship and use of the forests and forest land, in a way and at a rate, that maintains their biological diversity, productivity,

regeneration capacity, vitality, and ability to fulfil now and in future, relevant ecological, economic and social functions, at local, national, and international levels. The Forest Policy is enacted through regulations that;

- Allow access for all people to all forest lands, private and public.
- Mandate regeneration after harvesting and protect habitats during harvests.
- Collect and collate national forest data.
- Protects special areas, habitats and species.

In Slovakia it's the processing industry and its use of the available resource that stands out in stark contrast to Queensland. Like Latvia, Slovakia has an amazing forest resource, covering approximately 45% of available land area. This resource has developed along with the management systems and law over centuries. One of the oldest forestry schools thought to exist in the world is located in Banska Bystrica, founded in 17th century.

It's simply stunning to walk through a mixed species broadleaf hard wood forest of oak, beech, ash, maple and lime that is nearing harvest age (\pm 150 years oak) (\pm 80 – 100 beech) and to realise that this forest has been under continuous sustainable management for 500 years, and is on its third or fourth harvest cycle. When these forests are thinned or harvested, nearly every stick of timber is put to commercial use. Waste is very low.



*Overstocked Australian native forest.
The thinnings would be regarded as non-commercial, yet highly suitable for pulp.*

A few years ago I completed a valuation process of a forest near Mundubera in Queensland. I was measuring and valuing stands with old Queensland friends and forest owners Andrew & Sharon Harwood. Drawing on their local market knowledge and a few new tricks I had learned in

Latvia & Slovakia we put together a valuation for small regenerating stand of mixed hardwoods (ironbark, spotted gum, dominated). What shocked me was the waste of wood. This tree or that tree was too mishaped to be of value. This tree has a little bend so perhaps could be used to produce a fence post or two, but I would have to do the work myself, no-one would come and buy that kind of product. "What about pulp or woodchips as a product for my thinning?" I asked. There is no pulp or wood-chipping plants buying up thinnings. Apparently there is a strong resistance from the environmental lobby to any form of native chipping or pulp. What those opposed to wood-chipping and pulp don't realise is it's not a problem of chipping old growth, which should not happen, but really just a problem of good legislation and enforcement. Native forestry needs woodchip and pulp plants to make the business of growing and EXPANDING the forest resource work.

As to what kind of logs the local Queensland mill would purchase... again another shock. Basically it seemed that they would only take first grade logs, straight with few defects or bends. In Slovakia our mill would take in approximately 12,000 m³ logs per year and our partner on the same site probably 25,000 m³ per year. If we went to a local forest owner and asked to purchase only first grade logs, his response would be: "Who then will buy my 2nd or 3rd grade? If you want the best of what I've got then you have to buy some of my 2nd and 3rd." High-grading eventually kills the forestry business. Often our company would make deals with other mills to gain a greater share of 1st quality logs, or simply pay a premium to the forest owner to ensure a first grade supply. This

type of arrangement exists at all forest scales from a small local farmer or community, or whether we purchased from Kosice Town Forest, the largest municipal forest in Europe.

At the processing end, the use of the forest resource is maximalised. Bent and defective logs, basically 3rd grade, are processed at all mills big and small and turned into smaller and smaller components. The smallest piece of wood that flows out of most mills is 25mm x 50 mm x150mm, typically for floor parquets. Mills join forces to market their products, sometimes with many mills providing components at a specific size to meet a large order. Our company might get an order for 10,000 components for chair legs. In our optimising process we may only make 3,000 components of that particular size in a month, but big and small mills in the area would then contribute to make up the difference. We could easily make those chair legs from 1st grade logs, but that would be an expensive waste. A greater number of smaller, specialised mills are needed in Queensland to support growers and other mills. More mills does not necessarily mean more forest cut down, hence less forest. More mills can make the business of growing trees more profitable and in fact increase the number of forest hectares.

In conclusion, the fundamental needs of a strong and vital forestry industry are:

- Good forestry law and implementation and respect for that law
- De-regulation and diversification of the processing industry
- General agreement between the grower, environmentalists, general public, processing sector, that the law satisfies their basic needs and general respect for what each other is trying to achieve.

Queensland is not Eastern Europe and there are many social, market, environmental and structural differences. Eastern Europe countries have forest law dating back 700 years with successful forest management dating back even further. Eastern Europe has a beautiful sustainable forest resource and profitable forest industry that is full of vitality. Queenslanders could learn a lot.