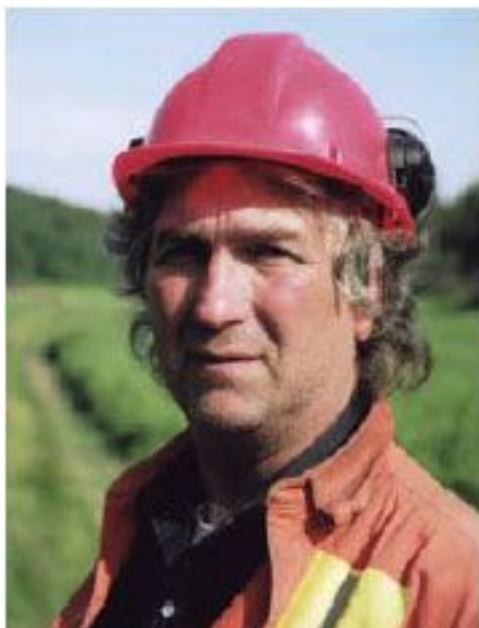




A logging outfit in Prince George is specializing in removing beetle-killed wood from sensitive areas in and around the city, using small machinery—Kubota excavators equipped with Rotobec grapple heads—sized to the demanding task.

*By Jim Stirling*



*One of TDB Consulting's Kubota machines at work in the Prince George area (top). Bert Berry (above), TDB's field operations supervisor, relishes the challenge of the work: "They're always throwing new stuff at us and we'll do it and we'll do it properly."*

No one would confuse this operation with a production oriented conventional logging show. But when it comes to singlestem salvaging of beetle-killed pine in the urban forest and helping protect a community from wildfire, TDB Consulting Inc, is a go-to company for applying the right machine to match demanding job descriptions.

TDB has amassed its experience with the pioneering use of primarily mini-size equipment in and around its home town base of Prince George, British Columbia. The company and its crews have developed techniques to extricate beetlekilled wood from often sensitive areas, while retaining as much of the forest structure as possible.

TDB uses small machinery—but it's made a huge impact in Prince George while working under contract to the city. "We have removed more than 550 logging truck loads just from city parks, greenbelts and school properties in the urbanized areas of the city," explains Mark Fercho, environment manager for the City of Prince George.

These loads don't include beetle wood removed from larger cutblocks and rural areas or volumes removed from Crown and private lands in the city. "It's just the really noticeable stuff that people live next to or visit every day," adds Fercho. Prince George has recently developed a Community Wildfire Protection Plan. The inferno around Kelowna and other parts of BC's

southern Interior in 200 opened the eyes of many to the dangers of fuel accumulations in the forests where they abut the nearest subdivision. Prince George's protection plan includes removal of beetle-killed pine, other tree species, pruning, brushing and thinning as directed site specifically.

TDB Consultants is working for the city on implementing the plan's recommendations. To help it do that, the company recently acquired two new Kubota rubber-tired excavators. The KX121-s were purchased through dealer Douglas Lake Equipment in Quesnel, but represented proven and familiar machines to TDB and most of its crews.

"We've been renting them for more than a couple of years," says Bert Berry, "so we know them pretty well." Berry is TDB's field operations supervisor, charged with making things work in the bush. The rented Kubota excavators, fitted with a bucket and a thumb, were primarily assigned to hoe chucking chores. The new KX121-s are equipped with 60 degree rotating pulp grapple heads from Rotobec, which Berry says offer a range of efficiencies and operating advantages. The rotating Rotobec head can turn, pull and maneuver full-length felled logs out with less collateral damage, points out Berry. Saving the new re-gen and other growth is a major objective on most sites TDB works.

There are other pluses. The Rotobec grapple can deck and its flexibility is demonstrated when it comes to collecting and piling brush. One of the Kubota machines was busy with that task recently at Morre's Meadow in Prince George. It is natural grassland area mixed with heavily forested ridges between the Nechako River and built-up areas. It's used and much appreciated by outdoor recreationists, like joggers and naturalists. And it's shared with forest creatures including black bears. TDB is used to dealing with people (and bears) in Prince George's urban forests. They try to devote considerable time to public relations and explain to people what they are doing, says Berry. The parks and greenspaces belong to the people.

Berry says the acquisition of an ASV Positrack 100 mulcher complements the Kubota/Rotobec combination and makes dealing with brush much more efficient. Working with the rotating grapple puts less lateral strain on the Kubota's boom, continues Berry. That's important because the design purpose of an excavator is to dig, essentially a vertical plane function. The Kubota's booms were also replumbed to better accommodate logging duties with the rotating grapple. The diminutive machine's size is right on for most of TDB's beetle salvage work. Job descriptions typically restrict trail size widths to 2.5 metres. The KX121-s are about five metres long with an overall width of around 1.6 metres. They can put it an eight-hour day on a single tank of gas in the machine's 64 litre fuel reservoir. There needs to be a strong interdependence of log harvesting phases if TDB's work is to be done most efficiently. "There's lots of methodology involved," expands Berry and each site requires analysis. "The falling is technical; you have to think about each tree." All the wood is hand felled and it's not just a case of getting it on the ground. It's where it's positioned in terms of reducing damage and how the log can be retrieved. TDB has three Forcat 2000 small size skidders manufactured by Berfor to move logs out. The new Kubotas with Rotobec grapples contribute to skidding efficiency with their ability to lift the wood off the ground.

The new grapples represented a learning curve for operators: figuring out what they could do and how they contribute to the overall operation. Interestingly, lots of the crew—and the work is labour intensive—had not worked much in the bush before hiring on with TDB. But Berry reckons that turns out to be an advantage: they're more aware of the specifics of single stem removal in parks and sensitive areas where conventional log harvesting practices and habits wouldn't work.

And another advantage: TDB offers a 12-month-a-year job. "Our crews are very good at what they do," says Berry. TDB is a trailblazer in the field of small scale machine utilization and it's a rapidly evolving process. It's one Berry relishes. "They're always throwing new stuff at us and

we'll do it and we'll do it properly."





