

take *note*

Battling the Beetles

□ You could squash one to death between your fingers: they're only 5mm long. But en masse the Mountain Pine Beetle has been responsible for the destruction of approximately 40 per cent of BC's pine forests over the past ten years, about 13 million hectares. Western Canada's forests are now patch worked with stands of discoloured dead and dying trees. Because the wood from these specimens is typically stained blue from a fungus produced by the beetle, it is difficult to salvage anything from the destruction. The tiny pest has left the ecosystem weakened, profits lessened and foresters stumped.

In 2006, associate professor Joerg Bohlman was one of a team of international experts on forest health genomics that mapped and sequenced a tree genome. It was the third plant ever to be sequenced. Further UBC research into tree genetics is now shedding light on the natural defense systems of pine and spruce, such as their ability to protect themselves from insects and disease. This knowledge will help foresters decide on the best breeding practices to improve the long-term health of forests.

Bohlman and research associate Christopher Keeling have been investigating a substance found in spruce known as Oleoresin. They discovered that it continuously changes its chemical makeup in response to altering conditions and threats to the tree's health. They published a study on how this molecular activity interacts with bark beetles on a genomic level, as well as the fungal pathogens they can produce. The work was featured in a January edition of the *Proceedings of the National Academy of Sciences*.

"Conifers are some of the oldest and longest living plants on the planet," says Bohlman, who is based in the multidisciplinary Michael Smith Laboratories. "We've opened the book to understanding how they can survive in one location for thousands of years

despite attacks from generations of insects and disease," he says. Bohlman recently agreed to co-lead a \$4 million project funded by Genome BC and Genome Alberta aimed at tackling the Pine Beetle infestation.

Not Just Pie in the SkyTrain

□ With the second highest number of commuters in the Lower Mainland, UBC's Vancouver campus has undertaken a number of green initiatives to help staff, faculty and students find responsible transport alternatives to single-occupant vehicles. Persuading the most reluctant commuters should become a lot easier after the provincial government's recent announcement on transit expansion. The budget is \$14 billion, which includes \$2.8 billion for a new SkyTrain line to Point Grey as well as a pumped up bus service.

Both the university's administration and the student Alma Mater Society welcomed the news. "This investment helps us continue our shift from being a car-oriented campus to a transit-centred one," says professor Stephen Toope, UBC's president. "We are also pleased that RapidBus service will be expanded to Kelowna, thus providing sustainable choices for our UBC Okanagan community." Translink will work with the university on incorporating the SkyTrain line into the University Boulevard Neighbourhood

and proposed underground transport hub that will include a new bus terminal.

Cheers for Daniel Pauly

□ Professor Daniel Pauly, director of UBC's Fisheries Centre, has been recognized for his contributions towards the protection of the oceans at a star-studded award ceremony held in Los Angeles. The Ted Danson Ocean Hero Award is given annually to professionals whose work is dedicated to preserving and improving the health of our oceans. Previous honourees include Jean-Michel Cousteau. A second award, the Partners Award, acknowledging personal commitment to the same cause, was presented to Al Gore. Previous honourees include Hillary Rodham Clinton and Ted Danson. Pauly also received an honorary doctorate in February from the Katholieke Universiteit Leuven in Belgium.

Is a House a Home?

□ In Vancouver, where affordable housing is becoming an oxymoron, many people may be wondering whether or not they can afford to have children. If you can barely manage the mortgage on a condo, let alone a house, where the heck are you supposed to keep them? Is the housing market driving people's decisions on whether or not to start families, or are there other factors at play, such as



L-R: DANIEL PAULY, Oceana CEO ANDY SHARPLESS, ANJELICA HUSTON, AL GORE, MARY STEENBURGEN and TED DANSON.