## Neglect of historic proportions: cost of fire prevention too high

Historic buildings do not require fire safety measures, but as MERLE FOSTER, JESS SKINNER and FELICITY REID report, alarm bells should be ringing.

ew Zealand's precious heritage buildings are being damaged and destroyed by the ravages of fire at an alarming rate.

According to New Zealand Fire Service statistics 15 heritage buildings are burnt to the ground or suffer substantial damage each year.

A lack of fire detection systems and sprinklers, the widespread presence of old timber in the buildings and the frequent occurrence of arson are all contributing to the high rate of destruction.

Auckland City Council heritage manager George Farrant says heritage buildings are of significant importance to New Zealand as they have both social and personal meaning for society.

He describes historic buildings as "barnacles stained with laughter and toars"

Farrant believes Aucklanders are much more heritage-minded and enthusiastic than they once were.

He says there has been a great increase in the number of professionals seeking office space in heritage buildings

In July last year a 0.5 percent targeted rate – equal to a \$6 increase for the average ratepayer - was introduced. This will generate an extra \$1.4 million a year, allowing the council to fund its Heritage Week in September, as well as allowing for more of the city's natural and built heritage sites to be protected

Both the fire service and the New Zealand Historic Places Trust see heritage as something that needs to be protected for future generations.

Both organisations provide information about the best ways to protect heritage buildings.

Historic Places Trust heritage advisers, conservation architects and fire safety specialists can advise how to install fire detection systems without interfering with a building's aesthetic and historic value.

Poor renovations conducted without an understanding of heritage buildings and appropriate materials can leave them even more dangerous in the event of a fire.

Neil Challands, fire service fire safety information analyst, says old wooden buildings are more prone to severe fires as they do not have the fire-resistant cladding and linings of modern buildings.

"Dry old kauri and rimu generate more heat than pine, so the fire will be more intense once it has got hold," he

In September 2002 the township of Te Karaka near Gisborne lost a significant piece of history when the historic Rangatira Tavern was destroyed by fire.

The entirely timber hotel, built in 1913, was a central meeting point for the community.

Challands points out none of the heritage buildings damaged or destroyed by fires in the last three years had sprinkler

"As far as we can tell only about one in



ROCKY HORROR: Arsonists destroyed the Rocky Bay Store on Waiheke in 2004, only months after it gained heritage status. The case remains unsolved.

10 of them had smoke alarms," he says.

The fire service views sprinklers and smoke alarms as an effective combination in saving buildings.

New Plymouth fire safety officer Peter Gallagher said only one marae in the Taranaki region had automatic smoke alarms and no marae had automatic sprinklers.

An estimated six fires a year damage marae across New Zealand.

"Sprinklers have never been viewed as a cost-effective fire control measure, when, in fact, they are probably the most effective control measure," Gallagher

Christchurch's 1870s Awhitu House, linked to Taumutu Marae, burnt to the ground in April 2003.

He describes historic buildings as "barnacles stained with laughter and tears".

"An ideal safety measure in this instance would have been a sprinkler system, which would have controlled or put the fire out early," says Piki Thomas, the fire services national Maori advisor.

All marae are urged by the fire service to think about fire safety for their buildings, especially in sleeping areas.

Fire service staff provide a free discussion on fire safety options to marae committees and trusts.

Challands says about two-thirds of heritage building fires are caused by arson.

Most attacks on heritage buildings are started outside the building, with no break-in involved.

"A big problem with shops and hotels is they leave piles of cartons and rubbish outside which invites arson," he says.

Meanwhile the fire service is pushing for a residential-scale sprinkler system for installation in houses.

On average, houses without sprinklers suffer \$67,000 worth of damage when fire takes hold.

A building which has sprinkler systems installed can cut its average fire damage costs to approximately \$3000.

But in many cases the contents of heritage buildings are irreplaceable and priceless in dollar terms.

Installation costs of sprinkler systems in heritage buildings can be significantly higher depending on the size and structure of the building.

Mike Butler, North Shore City Council heritage officer says: "the installation of a sprinkler system for an older building costs approximately \$5000."

Some owners or proprietors could face financial barriers in their attempts to install fire detection and protection equipment.

In September 2001 fire engulfed the Te Kainga homestead at Mangatawhiri in northern Waikato, destroying 70 percent of the house in 15 minutes.

Owner Jamie Lyons rebuilt the house but discarded the idea of installing a sprinkler system because of the \$50,000 cost of its installation.

The Summit Tearooms on State Highway 5 in Napier, were damaged by a deliberately lit fire in February 2004. This heritage building did not have any fire detection equipment.

Tokatoka Tavern in Ruawai fell victim to a suspicious fire in May 2005.

Indeed, 40 per cent of heritage building fires occur in rural areas, according to the fire service.

Rural heritage buildings stand less chance of survival thanks to the extra travel time needed by fire appliances.

Within urban areas the fire service will generally reach the fire within 10 minutes.

Challands says many of these historic rural buildings are old homesteads and farm buildings in remote rural areas.

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"By the time the fire service arrives they are just a pile of charred timbers," he says.

Farmers in remote areas have to take

their own fire protection measures, such as extinguishers and domestic sprinklers, he says.

"There are rural fire parties run by the local authorities but they are not trained or equipped to do anything more than stand outside the building and spray water on it."

Not all heritage buildings are bound by law to have fire detection and protection systems.

Challands points out legal requirements for fire protection depend on the buildings' use.

Building regulations stipulate fire protection with a focus on evacuating all people from the building but do not protect the building itself.

Historic houses and farm buildings have no legal requirements for fire protection measures.

Shops and schools require alarm systems according to the number of occupants.

Challands says the general attitude is that "if it is not mandatory then don't do it".

"They choose to have minimum legal requirements."

Between 2003 and 2006, 24 residential heritage houses have been damaged or destroyed by fire.

That accounts for 45 percent of all heritage fires in the last three years.

A good number of these houses would have had no detection systems because they were not legally required to.

But fire protection and detection systems in heritage buildings also play a major part in getting insurance for these buildings.

New Zealand Heritage magazine says one way for heritage building owners to reduce insurance costs is to invest in additional fire protection.

New Zealand's heritage buildings face a high number of threats. More research, finance and effort is required to protect them.

George Farrant says that although it is important to protect heritage in our society, it is equally important to build on it by not protecting everything.

"We need to leave representative threads of the past to wind together with the future to generate more history for our descendents," says Farrant.