Ways sought to deal with bush fires in summer

SUMMER WEATHER brings renewed interest in the outdoors, with families and individuals spending time enjoying the many activities that the superb natural surroundings of New Zealand provide. For many this time of year is marred by the frequent fires which destroy semi-natural rural areas or local areas of bush.

REGENERATING FOREST or mixed native plant and gorse areas referred to as "scrub" in the news media are of importance to Society members. They are regarded as potential local reserves, and some are the only natural local area where children play.

Larger fires in natural areas exact a considerable toll in wildlife and habitat.

Cost

In all fires there are high costs — men's wages, equipment, chemicals, transport helicopters, accidents, and property damage.

Bush fires are started by one of these causes:

- Natural (spontaneous).
- Accidental.
- Controlled burn-off.
- Uncontrolled burn-off.

Once started they are fought by one or a combination of the following: Local volunteer bush fire force, local volunteer firemen, the Fire Service, or the Forest Service. Sorting out who is in charge and who pays is not easy and does not always go smoothly. Resolving who is responsible for the damage and how to prevent recurrence seems to be an even more difficult task and is seldom undertaken.

By Russell Bell

Hot-spots

When a fire is out, hot-spots remain, which depending on the seriousness of the situation, may be dealt with or left in the hope that they will not flare and burn more "scrub". Hot-spots (slow smouldering places where air circulation is limited) occur when native bush burns and are most prevalent in tree fern trunks and in holes in logs or where log are in partial contact with the ground.

Hot-spots can flare up 1 or 2 days after a fire is thought to be out. They occur generally during a windy period of the day and are preceded by the appearance of smoke, which allows (usually) sufficient time, if equipment and spotters are on hand, to ensure that the hot-spots do not trigger another fire.

Eastbourne fires

The circumstances described above were all present in fires this year in Eastbourne (on the eastern side of Wellington Harbour). The borough there is fortunate to have large reserves cloaked in native forest. Slopes facing the borough's main road contain the poorest quality vegetation and all have areas of gorse,

some of it recently burnt. As the gorse grows it provides an ideal nursery for native plants. It has but one failing: It is susceptible to fire.

When the gorse burns, the native plants are also incinerated. Flax and tree ferns may survive, especially if growing beside a track where the heat is less intense, but plants like five-finger, hangehange, and manuka will be lost.

The pattern of growth and destruction will be repeated again and again unless a factor can be introduced which allows the native growth to continue past the danger point and crowd out the gorse.

Two other factors were present in Eastbourne fires:

- All fires started from a roadside.
- The presence of pine trees intensified and aided the spread of the fires. Subsequently the fire helped the spread of pines by providing high light conditions suitable for their regeneration from seed. Seed is dispersed from cones after the pine trees have been burnt.

Solutions

Eastbourne Borough has attempted to solve some of the problems as follows:

The borough council has