The Secretary, Pukekura Park Committee, NEW PLYMOUTH.

Dear Sir,

Replying to the question regarding the Pukekura Park tennis and croquet club area submitted by the New Plymouth City Council, I consider that, from the horticultural and aesthetic anglo, it is advisable and necossary to proceed with the contemplated resumption of the area for planting. I have reached this conclusion after more than 12 months consideration of the problems and practices involved.

Essential Character of Park

The ossential character of Pukekura Park may be summed up under two headings (a) unique features (b) majestic grandeur.

The majestic grandeur is created by the combined effect of the steep hillsides and narrow valley, a large expanse of sheet water, tall trees and luxuriant tree ferns. The pines give the height, and the tree ferns a distinctive character. Without these the park would fail to give visitors that almost undefinable but lasting impression. The height factor of the pines is much more important than the pines themselves.

Planting of Pines.

When these trees were planted the founders of this park evidently planned for the future. At that time it was not known that these pines when transplanted from their native home to all parts of the world would make such phenomenal growth and size. Examination of fallen trees has shown that phenomenal growth was attained during the first 14 to 16 years, and vigorous growth continued for the following 22 to 25 years. The rate of growth decreased rapidly after 40 years, and by the 60th year the annual rings were almost indistinguishable to the unaided eye. There are other trees, including natives, which would give a life cycle of several hundred years, but all of these are much slower than pines in growth. Most of them are not suited to the exposure to which their height would later subject them.

From the aesthetic and landscape point of view the tall spire-like and pyramidal forms are by far the most effective. There are a few trees, apart from pines, which are suitable to exposed conditions. To plan a succession of pine trees would require grouping over a large area, and new group plantings every 30 to 40 years. Pines to replace the existing trees should have been planted behind them some 20 to 30 years ago. Other conifers should have been planted 40 to 50 years ago. These plantings have been deferred until now it is almost too late. Imagine the western side of the main lake without any tall trees! It is not possible on this side to remove a block and plant quick growing pines to take their place, as many trees are now brittle and others have a pronounced lean. It would be dangerous to remove any but those at the northern end and these are too far forward for their size and should be replaced with trees of a

Scheme of Planting.

From the aesthetic and landscape viewpoint we must consider the plants to be grown in association with the back-ground or skyline subjects. These should be selected for con-

The Secretary, rukekura Park Committee, New Plymouth

trast in flower foliage and shape. A uniform monotony of colour and form is all too common in landscape effects. The range of plants suitable is determined by the soil and climatic conditions, and these are affected to a considerable degree by the background subjects. The pines, due to their phenomenal growth and spread, have a detrimental effect on all but the hardiest and often less attractive species. They have forced adjoining trees to grow out, thus crowding out and degree by the background thus crowding out and depriving lakeside and valley plantings of essential light and the full benefit of light rains. Underground the enormous system has robbed plants of nourishment and moisture. Later the pines crowded one another with the loss of lower limbs and even whole trees.

Ground Draught.

This position was probably aggravated by the removal of trees or side branches on the west side many years ago. True pines never refurnish lower down, though macracarpa and many other relatives will do so. The result of these changes was to create a ground draught which is detrimental to all forms of plant growth. Some subjects will make a sparse growth which will not check the draught, and most of them, particularly kawakawa and karamu, are very short-lived. This draught is also annoying and often chilly in shaded conditions. There are few really sheltered spots in the main park. Once these gaps occur they can be filled only by plantings on the windward side.

This fact is already obvious in the present case, but with severe cutting back on the lower sides the evergreen caks will be open at the base before they reach the desired height. Both from the landscape point of view and for the health of the skyline trees themselves it is desirable that they should be banked on both sides with a gradual reduction in height as occurs in nature. Ground draught is a vastly different problem from that of exposure. The amount of light available to plants and the root competition are two important factors. Shelter from exposure may be created by comparatively low growing subjects with dense foliage.

For the above reasons I consider resumption and planting of

tennis and croquet club area important and necessary.

Is there an alternative?
In my opinion the only possible compromise in order to retain part of the present playing area would be to fell all the trees on the bank to the west of the main lake, and replant the whole side of the valley, with the skyline trees hard up against the eastern side of the tennis courts. A complete clearance of the slope would be necessary, because the removal of the declining pines on the upper part of the slope would expose and endanger the leaning trees on the lower part of the slope.

The disadvantage of this compromise would be (a) it would still be necessary to take approximately half the croquet courts for replanting (b) the whole area to the west of the main lake would be comparatively bare and without a skyline for very many years (c) the roots and branches of the skyline trees would in due course encroach on the remaining part of the playing area, and the foliage would shade the area to an increasing degree (d) the occupants of the playing area would almost certainly trim back the western side of the plantation and thus create the ground draught which it is so important to avoid.

Furthermore this compromise scheme would rule out the banking of the skyline trees on the windward side with groupings of lesser growing subjects, of a variety of form and colour, and increasing the density of the western shelter, which is highly desirable.

For the above reasons I do not favour such a compromise.

Yours faithfully, "J. Goodwin" Curator PUKEKURA PARK.