

## Subdivisions Bring Weeds to Native Forests

Coastal forests are under pressure from the impacts of new subdivisions, especially in northern New Zealand, where weeds are escaping from gardens and infesting the bush. The Department of Conservation has been concerned that planned coastal subdivisions will mean more weeds in adjacent reserves. Until now, however, there has not been the hard evidence to counter claims by some developers that subdivisions are good for reserves as they bring more people to care for them.

By visiting coastal forests and their neighbouring settlements in eastern Northland, our team of ecologists from Landcare Research and DoC has now recorded all the exotic plant species at these sites, showing

how subdivisions affect the weediness of forests. Gardens in the area were growing 87 percent of the plants listed by the Northland Regional Council as the worst invaders of forests. In the reserves we often found piles of freshly dumped garden waste containing these invasive weeds.

Coastal forests near old or high-density housing were weediest. Forests with more than 70 houses close by had, on average, two and a half times as many weeds as forests with only a few nearby houses. The weediest forests were those near settlements with lots of exotic garden plants.

The settlement characteristics of housing age, density, proximity, and garden diversity explained an incredible 70 percent of the variation in the



Subdivisions introduce garden weeds to the forest, according to researchers. The native coastal forests with the most exotic plant species are those bordering old, dense settlements, like this one in Whangamumu Bay, Northland. The authors argue new subdivisions should be kept away from important conservation reserves.

diversity of weeds growing in these forests. Other ecological factors were insignificant. When it comes to the impact of weeds in native forests, it is the nearby houses that really matter.

A recent national survey, and international studies, concur with these Northland findings.

DoC's claim that subdivisions greatly increase the weed pressure on reserves is correct. Given the major effects weeds have on the ecology of native forests, we believe new subdivisions should be prevented

near important conservation reserves.

People already living near reserves can assist in maintaining the health of their nearby bush, by growing only non-weedy plants in their gardens, and by helping to control weeds in local reserves. Together, we could still make the optimistic claims of developers a widespread reality — to have ocean and bush views, and healthy native forests, too.

— JON SULLIVAN, SUSAN TIMMINS AND PETER WILLIAMS