ABSTRACT
A desire to enhance forest cover of watersheds in Hawaii resulted in numerous tree introductions in the first half of the 20th century. In order to assure the spread of introduced figs spp., successful efforts were made in the 1920s-1930s to establish the specific wasp pollinators for Ficus microcarpa (Chinese banyan), F. cf. platypoda (Port Jackson fig), and F. macrophylla (Montton bay fig) (Wagner et al. 1999). Vehicle surveys of roads in conjunction with walk-through surveys of known infestations resulted in detailed distribution maps for Ficus on the island of Maui. F. microcarpa and F. cf. platypoda have now become widespread invaders at low elevations on Maui, and F. macrophylla is starting to spread. Effects to date include damage to water-transporting infrastructure, displacement of lowland vegetation, and smothering of host trees (e.g. Acacia koa) after epiphytic establishment. Incontinent establishment of non-native birds, including nutted conures (Aratinga nitroidea), on Maui is likely to accelerate invasion of Ficus. Moreover, establishment and spread of Ficus may facilitate further invasion of non-native frugivores.

RESULTS
We surveyed 1,128 miles of roads over the last year and recorded 3,845 occurrence locations for 14 Ficus species. Three species of Ficus (F. macrophylla, F. cf. platypoda, F. microcarpa) and their associated wasps (Platysteltes froggatti, Platyplectus imperialis, Parapristina verticillata) were found to be naturalized on Maui. Driving the roads allowed us to have repeatable transects over time, to cover a lot of area with minimum effort, to provide an island view of distribution for each species, and to monitor "human" habitat which is often where most weeds are introduced and yet is often not surveyed by natural area managers.

DISCUSSION: INTERACTION & CONSEQUENCES
Ficus trees are widely cultivated, produce a large seed set, are long lived, can grow to enormous sizes, are readily dispersed by frugivores, can germinate and grow almost anywhere, and are difficult to control. Existing non-native birds eat and spread Ficus and will likely increase naturalization of Ficus, which may lead to increased invasion by these non-native frugivores, which could in turn accelerate the Ficus invasion. Infrastructure such as bridges, water delivery systems, buildings, and historical sites are all at risk from being broken apart by the penetrating roots of Ficus trees. Ficus trees also threaten the dominant native canopy tree species in both the wet and dry forests of Hawaii by germinating on and then smothering host trees such as koa (Acacia koa) and wiliwili (Erythrina sandwicensis). On West Maui (Oppenheimer & Bartlett 2000) report control methods are being considered for F. macrophylla, but its epiphytic habit, preference for native trees as hosts, and ability to germinate on sheer cliffs makes control options limited.

CONCLUSION
Three species of Ficus are invasive on Maui. They have scarcely begun to thoroughly invade natural areas, but as McKey (1989) put it Ficus "seems poised to join the ranks of human transported plants that threaten to homogenize the tropics into a ragtag assembly of pantropical invasive species."

LITERATURE CITED